

**WHITE**  
**MODEL 5500**  
**INSTRUCTION BOOK**

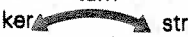
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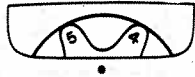
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## 1. NAMES AND FUNCTIONS OF PARTS

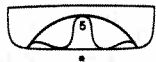
### Presser foot pressure control dial

To change pressure of the presser foot.

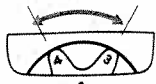
weaker  stronger



Raise foot when adjusting the dial.



To sew normal fabrics.



To sew thin or elastic fabrics.

\* Feed may be difficult at settings under "2".

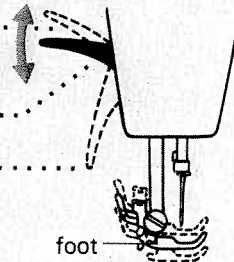
### Presser foot lifter

To raise or lower the foot.

To position and remove thick fabrics, buttons, etc. ....

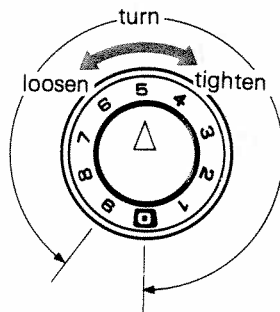
To position and remove normal fabrics. ....

For sewing. ....



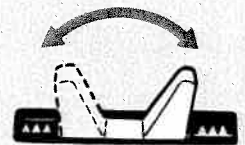
### Upper thread tension dial

To adjust upper thread tension.



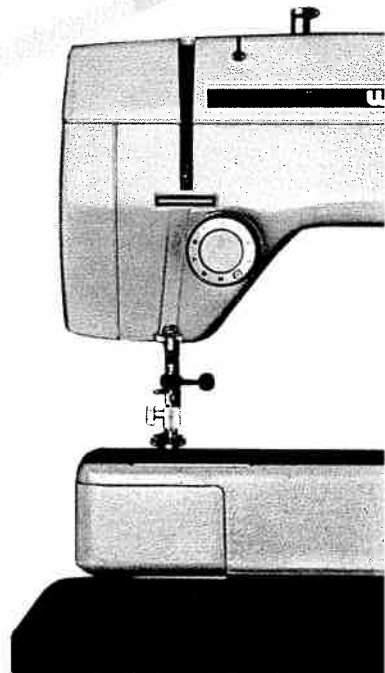
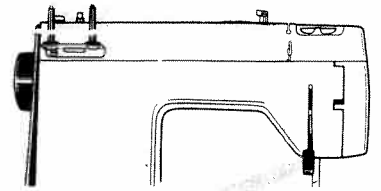
### Drop feed lever

To raise or lower the feed dog.



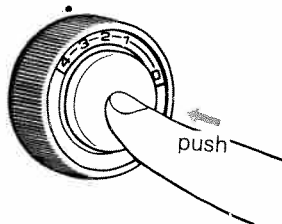
Not feeding.

Feeding.

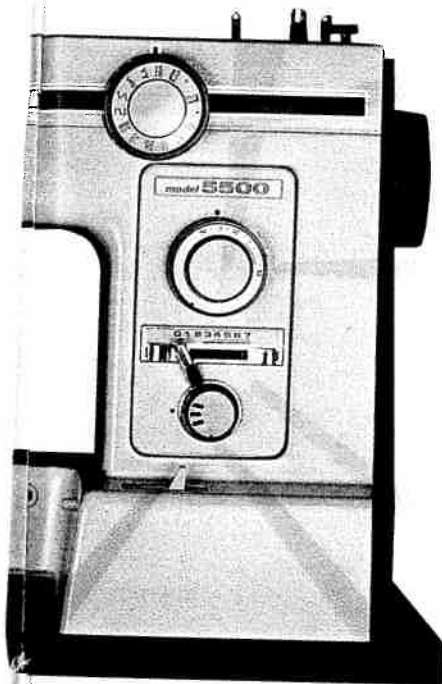


### Reverse sewing button

To sew reverse stitches.

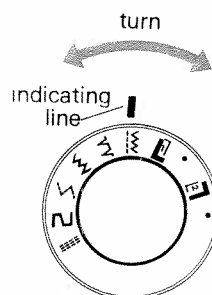


Continue pressing on the button while sewing in reverse.



### Pattern selector dial

To select the stitch pattern.



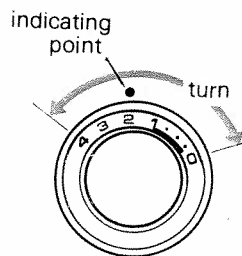
Set the selected pattern at the indicating line.

Adjust stitch length and stitch width within the colour band.

### Stitch length dial

To adjust stitch length.

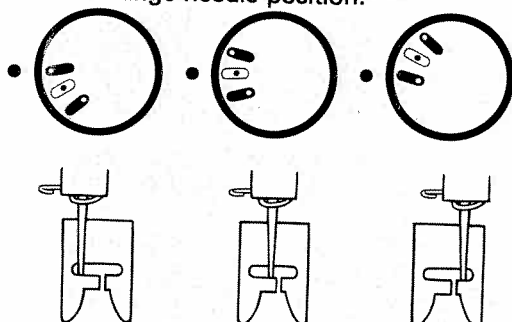
Set within the colour band according to the pattern selected.



0	1	2	3	4

### Needle position control

To change needle position.

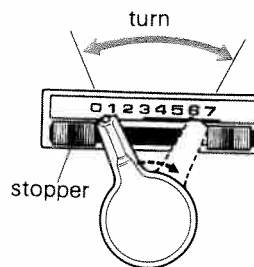


Make sure the needle is above the needle plate when operating the dial.



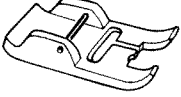
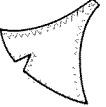



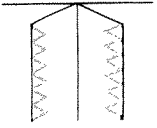
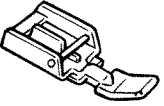

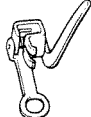

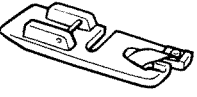



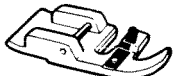


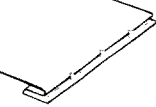
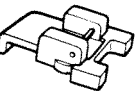

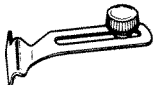
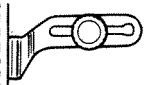
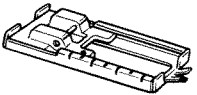



### Zigzag width control lever

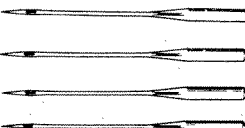
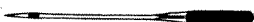
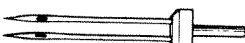
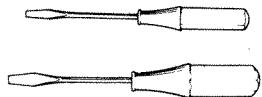


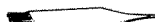

To adjust zigzag width.

Set within the colour band according to the pattern selected.



0	1	-	7

  <p><b>Straight stitch foot</b></p>	  <p><b>Special foot</b></p>
  <p><b>Zigzag foot</b></p>	  <p><b>Overcasting foot</b></p>
  <p><b>Zipper foot</b></p>	  <p><b>Darning foot</b></p>
  <p><b>Roll hemming foot</b></p>	  <p><b>Quilting guide</b></p>
  <p><b>Cording foot</b></p>	  <p><b>Blind hem stitch guide</b></p>
  <p><b>Button sewing foot</b></p>	  <p><b>Cloth guide</b></p>
  <p><b>Buttonhole foot</b></p>	  <p><b>Buttonhole cutter</b></p>

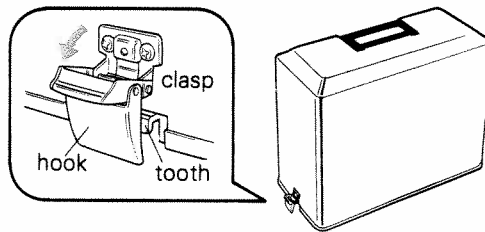
 <p>size 9/65 (1 pc.) size 11/75 (2 pcs.) size 14/90 (2 pcs.) size 16/100 (1 pc.)</p> <p>Ordinary needles</p>	 <p>size 14/90 (2pcs.)</p> <p>Ball point needles</p>
 <p>(2 pcs.)</p> <p>Twin needles</p>	 <p>small (1pc.) large (1pc.)</p> <p>Screwdriver</p>
 <p>Bulb</p>	 <p>(3pcs.)</p> <p>Bobbins</p>
 <p>Cleaning brush</p>	 <p>Oil</p>

— NOTE —

### 3. BEFORE SEWING

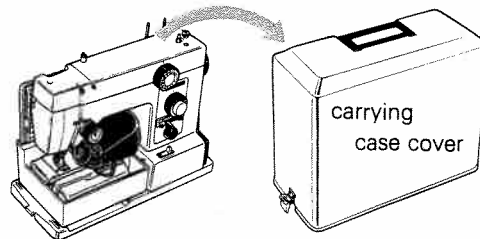
#### Unpacking the Machine

##### Step-1



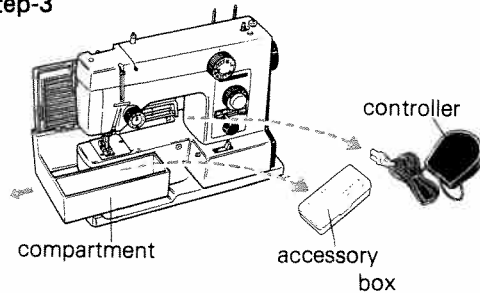
Place the machine on the table and unlatch clasps on both sides by pressing them slightly in the arrow direction.

##### Step-2



Remove the carrying case cover.

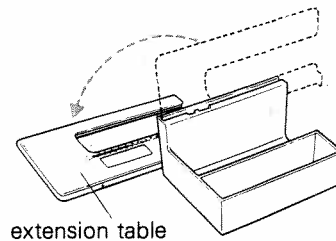
##### Step-3



Take out the foot controller and accessory box.

Slide the compartment in the arrow direction.

##### Step-4



Take out the extension table.

#### — Packing the machine —

Packing is the reverse of the above procedure.

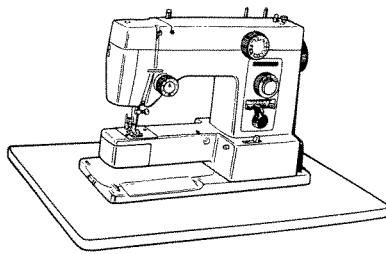
Note the following.

Lower the presser foot lifter when sliding in the compartment.

Make sure that the hooks of the upper clasps are firmly attached to the teeth when installing the carrying case cover.

## Converting the Machine

### For free-arm use



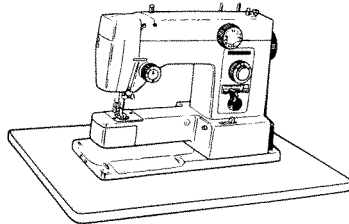
Without an extension table, the machine is used as a free-arm model for convenient sewing of trousers, sleeves, cuffs and the like.

\* Set the machine on a steady surface.

### For flat-bed use

Attach the extension table by the following steps.

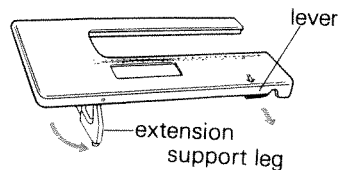
#### Step-1



Place the machine in the free-arm condition on the table.

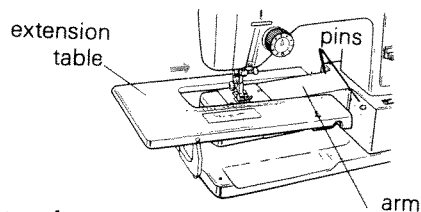
\* Be sure the machine is mounted steadily.

#### Step-2



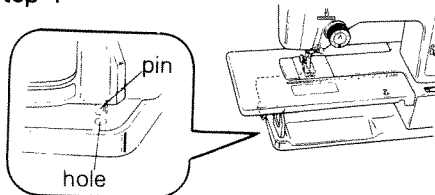
Push down the extension support leg and stand it.

#### Step-3



Pull out the lever and slide in the extension table in the arrow direction until it is supported by the two pins in front and back side of the arm.

#### Step-4



Fit two pins of the leg to the holes on the lower left of the machine.

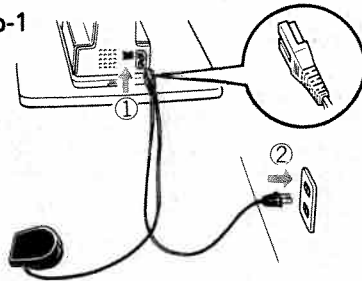
#### — Detaching the extension table —

Pull out the lever and slide the table to the left.



## Connecting Foot Controller and Power Cord

Step-1

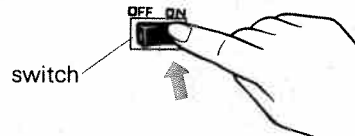


Make sure the voltage is the same as stated on the nameplate on the back side of the machine.

Plug in following numbers ① — ② as shown.

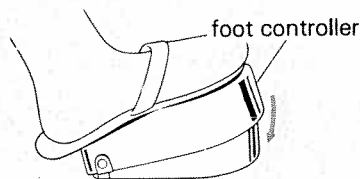
\* Always unplug the machine when not in use.

Step-2



Switch on the power to put on the machine and turn on the sewing light.

Step-3



The more you depress the foot controller, the faster the machine runs.

\* Be careful not to drop the foot controller from a high place.

## Fabric, Thread and Needle Table

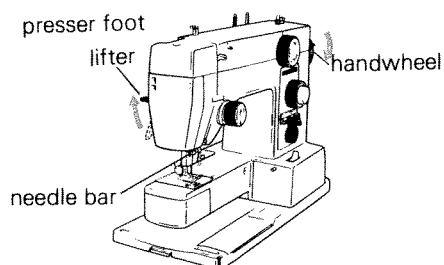
Always use Type 705 (Needle)

FABRIC	THREAD SIZE	NEEDLE SIZE	
		ENGLISH AND AMERICAN	EUROPEAN
DELICATE—tulle, chiffon, fine lace, silk, organdy	Fine mercerized cotton, fine synthetic thread	9	65,70
LIGHTWEIGHT—basiste, organdy, jersey, voile, taffeta, silk, crepe, chiffon, velvet, plastic film	50 mercerized cotton, "A" silk, synthetic thread	11	75,80
MEDIUM WEIGHT—gingham, percale, pique, linen, chintz, faille, satin, fine corduroy, velvet, suitings, stretch fabrics, knits	50 mercerized cotton, 60 cotton, "A" silk, synthetic thread	14	90
MEDIUM HEAVY—gabardine, tweed, sailcloth, denim, coatings, drapery fabrics	Heavy-duty mercerized cotton, 40 to 60 cotton, synthetic thread	16	100

\* For stretch fabric such as knits and jersey materials, use Ball-point Needle to get better stitch performance.

## Changing the foot

### Raise presser foot lifter and needle bar

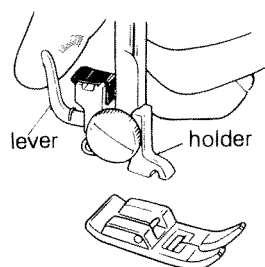


- (1) Raise the presser foot lifter.
- (2) Set the needle bar in the highest position by turning the handwheel toward you.

### Changing a foot

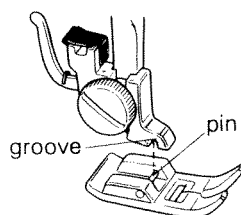
#### Snap-on presser foot

##### Step-1



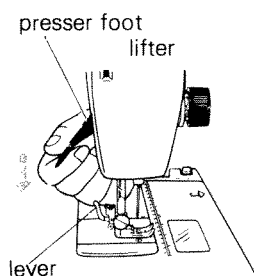
Push the lever of the holder in the arrow direction.

##### Step-2



Position a new foot with the pin right under the groove of the holder.

##### Step-3

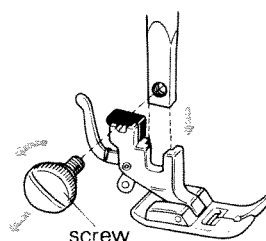


By lowering the presser foot lifter, the foot will be automatically snapped on.

\*When you fail to catch the foot, press the lever slightly.

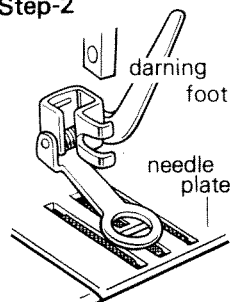
#### Screw-snap presser foot (darning foot)

##### Step-1



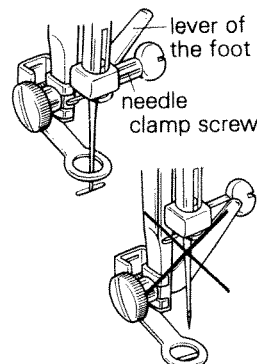
Remove the foot and the holder by loosening the screw with a screwdriver.

##### Step-2



Align the hole of the darning foot with the hole of the needle plate.

##### Step-3



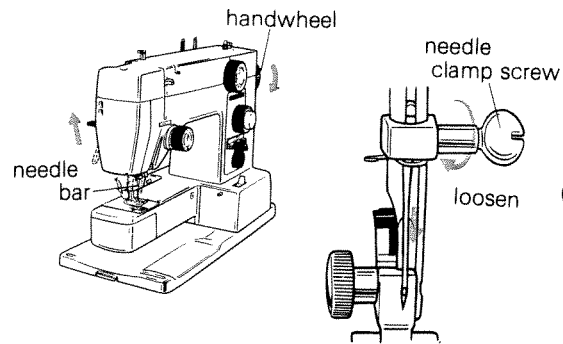
Lower the needle by turning the handwheel toward you.

The lever of the foot should be behind the needle clamp screw.

Tighten the screw on the holder.

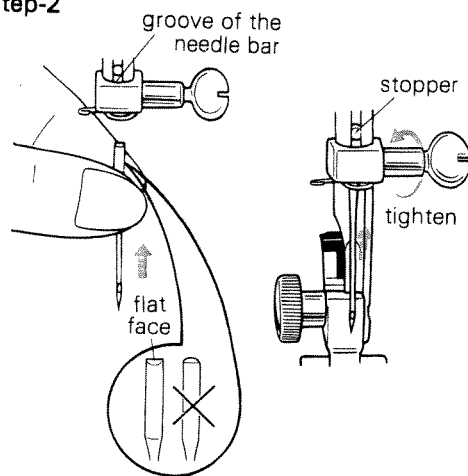
# Changing the Needle

## Step-1



- (1) Set the needle bar in the highest position by turning the handwheel toward you.
- (2) Loosen the needle clamp screw and take out the needle.

## Step-2



- (1) With the flat face away from you, insert a new needle into the groove of the needle bar.
- (2) Push the needle until it reaches the stopper and tighten the needle clamp screw firmly.

## — How to check your needles —

### Proper needle

It is straight.  
The gap is even.

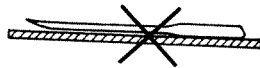


The point is sharp.



### Improper needle

Bent needle.



Blunt point.



Bent point.

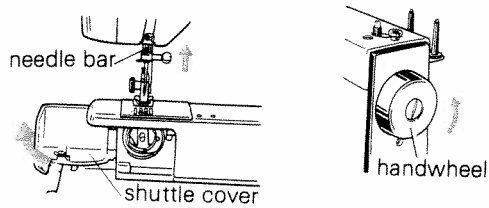


Using defective or worn needles not only causes stitch skipping, breakage of needles or snapping of thread; it also can damage the rotary hook and the needle plate.

## Bobbin Winding

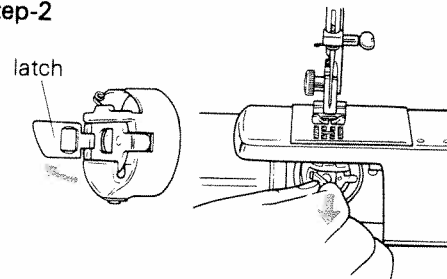
### Removing the bobbin case

#### Step-1

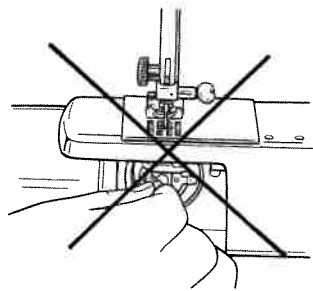


- (1) Set the needle bar in the highest position by turning the handwheel toward you.
- (2) Open the shuttle cover.

#### Step-2

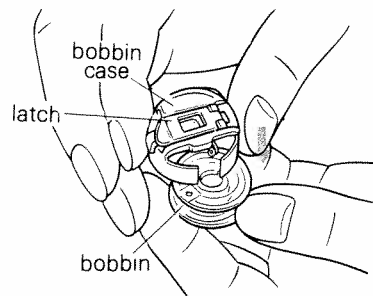


Open the latch of the bobbin case and take it out.



\* Be sure that the needle is in the highest position.

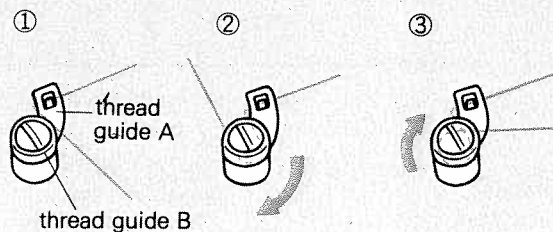
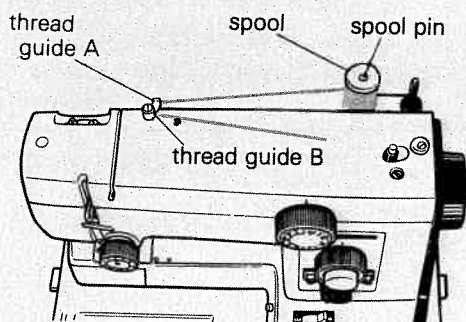
### Removing the bobbin from the bobbin case



- (1) Close the latch.
- (2) Hold the bobbin case with the latch upward as shown.
- (3) Bobbin comes out easily.

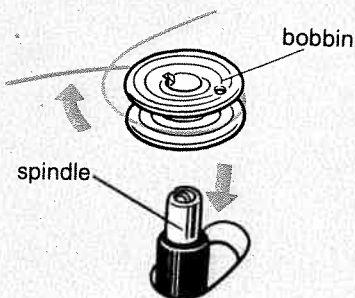
## Winding the bobbin

### Step-1



Put the spool on the spool pin. Draw the thread from the spool pin through the thread guides A and B as shown in ① ② and ③.

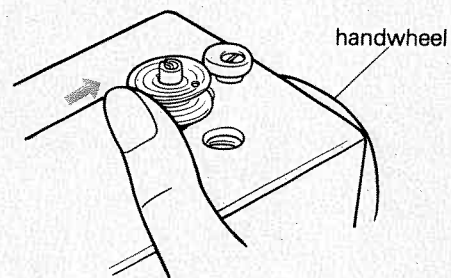
### Step-2



Wind the thread clockwise around the bobbin several times.

Push in the bobbin as far as it will go.

### Step-3

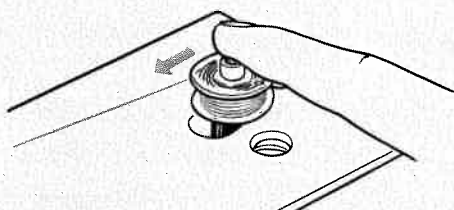


Push the bobbin toward the handwheel and press down the foot controller.

\* Not to place your fingers near the needle bar. Needle bar may move a little when starting to wind the bobbin.

\* Never press the spindle while sewing.

### Step-4

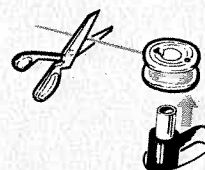


The machine stops automatically when winding is finished.

Return the spindle by pushing it in the arrow direction.

\* Be sure that the machine is not running.

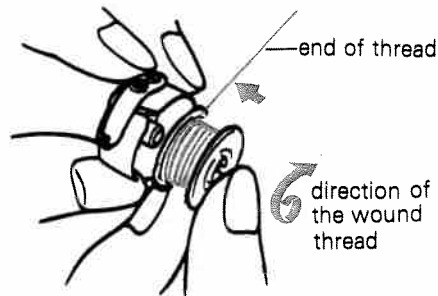
### Step-5



Take out the bobbin from the spindle and cut the thread.

## Inserting the Bobbin Case

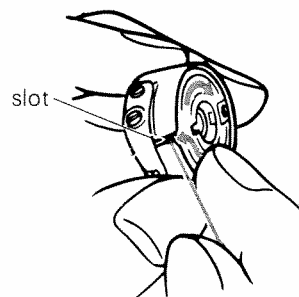
### Inserting the bobbin



- (1) The end of the thread is away from you as shown.
- (2) Leave the end of the thread of about 10cm (4") from the bobbin.
- (3) Insert the bobbin into the bobbin case.

### Threading the lower thread

Step-1



Slide the thread into the slot of the bobbin case.

Step-2



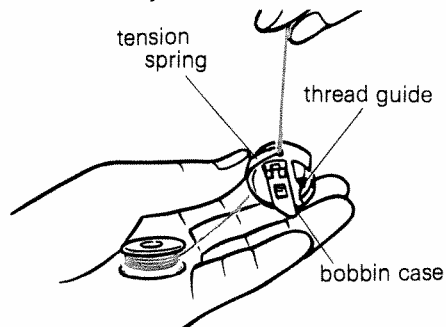
Pulling the thread to the left, pass the thread under the tension spring.

Step-3



Pass the thread through the bobbin thread guide.

### — How to adjust lower thread tension —



#### (1) Checking the tension

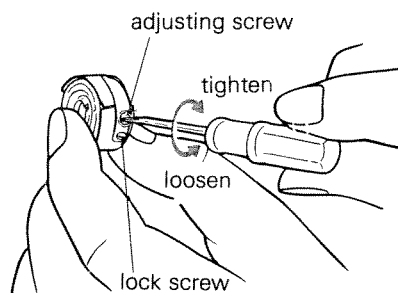
Complete the threading of the lower thread.

Take out the end of the thread from the bobbin thread guide.

Place the bobbin and the bobbin case on your palm.

Pick up the end of the thread and shake it gently.

At the proper tension, the bobbin case will gradually drop a small amount.



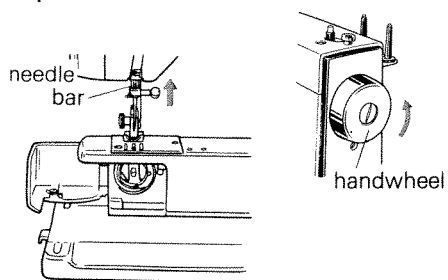
## (2) Adjusting the tension

Turn the adjusting screw with the small screwdriver for adjustment.

- \* Be careful not to touch the lock screw when adjusting the bobbin tension.

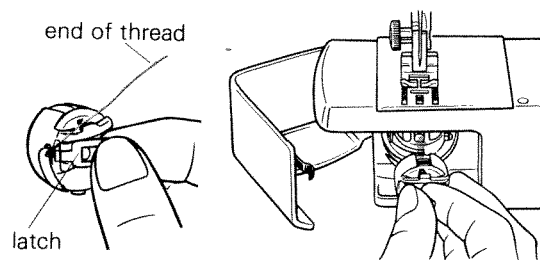
## Inserting the bobbin case

### Step-1



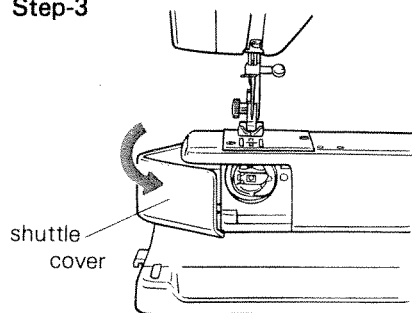
Set the needle bar in the highest position by turning the handwheel toward you.

### Step-2



- (1) Leave the end of the thread of about 10cm (4") from the bobbin.
- (2) Holding the latch of the bobbin case with your thumb and index finger, push the bobbin case into the rotary hook.

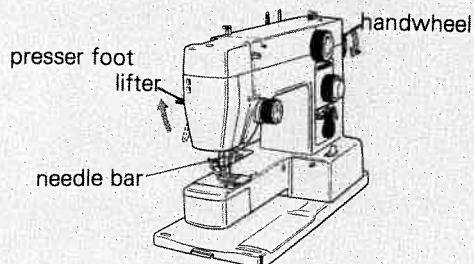
### Step-3



- (1) When the bobbin case is inserted, close the latch.
- (2) Close the shuttle cover.

## Upper Threading

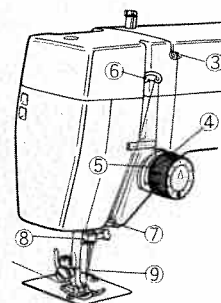
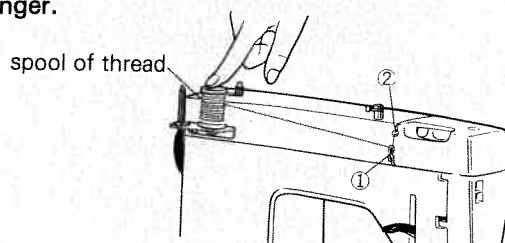
### Raise foot and needle bar



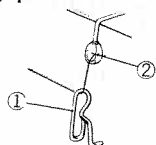
- (1) Raise the presser foot lifter.
- (2) Set the needle bar in the highest position by turning the handwheel toward you.

### Threading upper thread

Thread by following numbers ① — ⑨ while pressing the spool lightly with your index finger.

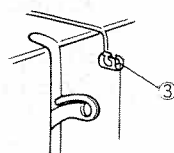


Step-1



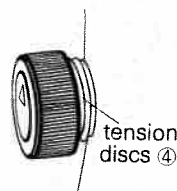
Pass the thread to the guides ① and ②

Step-2



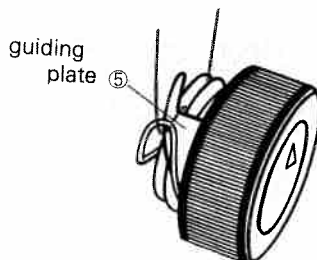
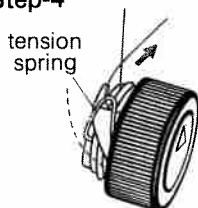
Then to the guide ③

Step-3



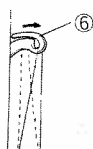
Lead the thread between the two tension discs ④.

Step-4



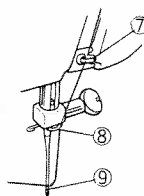
Lead the thread into the hook of the guiding plate ⑤ by pulling the tension spring to the right with the thread.

Step-5



Thread the take-up lever ⑥

Step-6



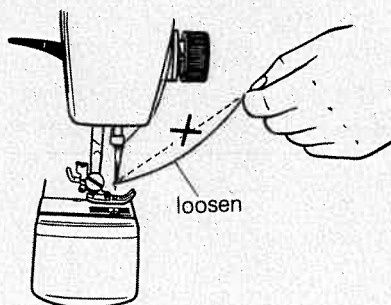
Thread the guides ⑦ and ⑧ then the needle eye ⑨.

Leave an end of the thread of about 15cm (6").



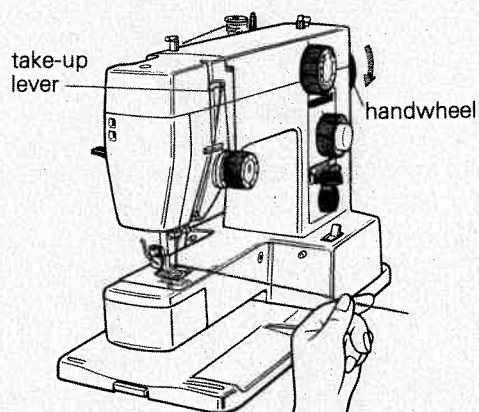
## Drawing Up the Lower Thread

Step-1



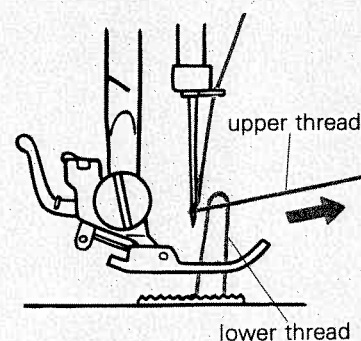
Hold the end of the upper thread gently in your left hand.

Step-2



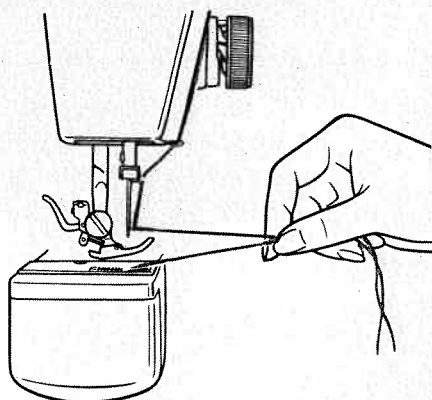
Turn the handwheel once slowly toward you. Stop turning it when the take-up lever reaches the highest position.

Step-3



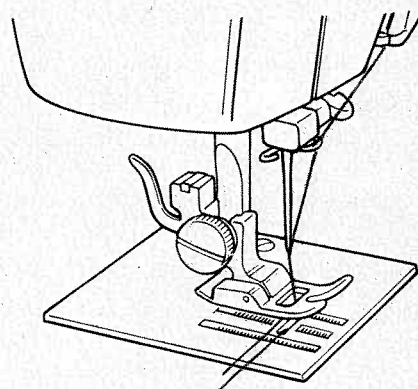
Pull the upper thread gently and the lower thread will come out.

Step-4



Pull out both upper and lower threads to about 15cm (6").

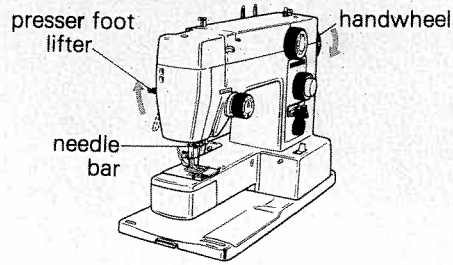
Step-5



Place both threads together under the foot on the left side.

## Twin Needle Threading

### Raise foot and needle bar

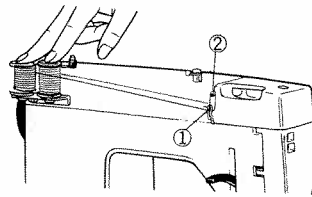


- (1) Raise the presser foot lifter.
- (2) Set the needle bar in the highest position by turning the handwheel toward you.

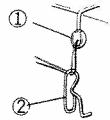
### Threading the upper thread

Thread by following numbers ① — ⑨ while pressing the two spools lightly with your fingers.

\* Be careful at the points ③ ④ and ⑨, since the way of threading is different from the normal threading with one spool of thread.

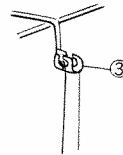


Step-1



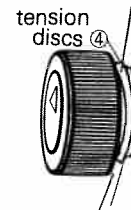
Pass the threads together to the guides ① and ②.

Step-2



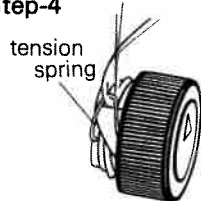
Pass them separately to the right and left at the guide ③.

Step-3

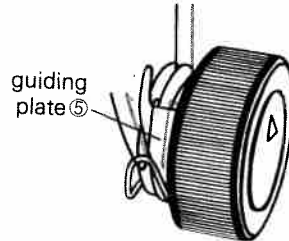


Lead one of the threads between the discs front and middle and the other one between middle and back.

Step-4

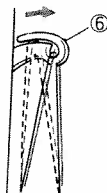


guiding plate ⑤



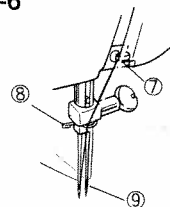
Lead the two threads together into the hook of the guiding plate ⑤ by pulling the tension spring to the right with the threads.

Step-5



Thread the take-up lever ⑥.

Step-6

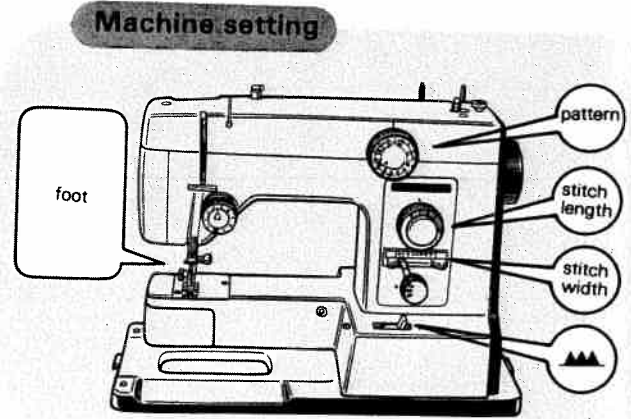
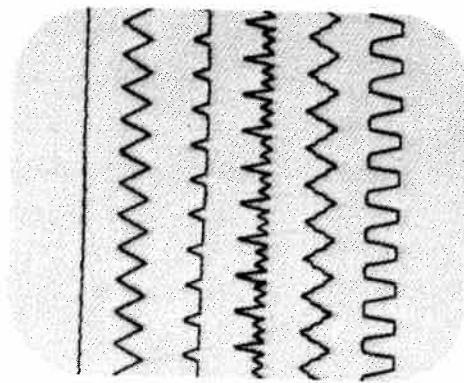


Thread the guides ⑦ and ⑧ then the two needle eyes ⑨.

Leave the ends of the threads of about 15cm (6").










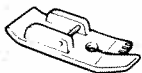

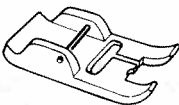
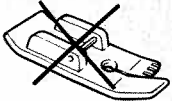
## Setting Patterns

### (1) Straight Stitch, Zigzag Stitch and Zigzag Pattern Stitches



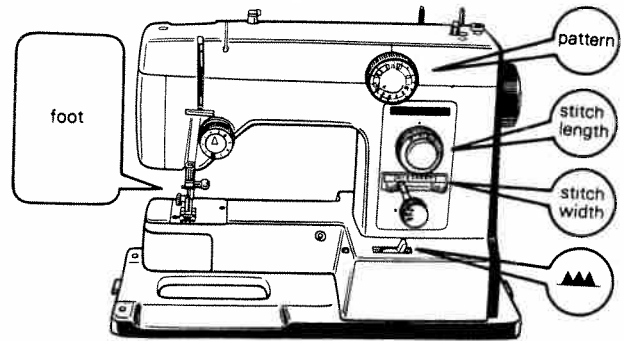
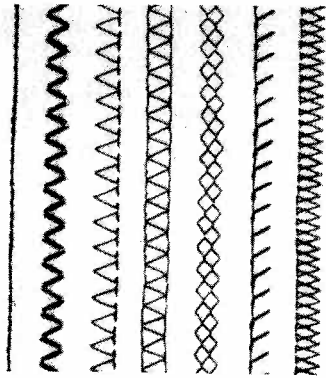
#### Pattern setting

Four zigzag pattern stitches are built in besides a straight stitch and a zigzag stitch. All of these are very useful for both practical and decorative sewing.

 pattern	M		1	2	3	4
						
 stitch length	1.5—4	0.3—4	1—2		0.5—1	
 stitch width	0	1—7	1.5—4		3.5—7	
foot	 straight stitch foot	 zigzag foot	 special foot	 straight stitch foot		












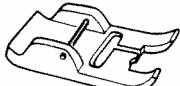

## (2) Super Stretch Stitches

### Machine setting



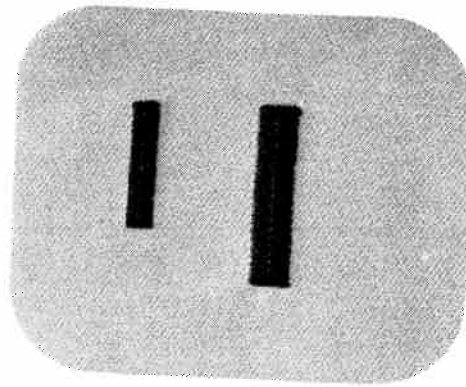
### Pattern setting

Seven super stretch stitches are built in. All of these are very useful for both practical and decorative sewing.

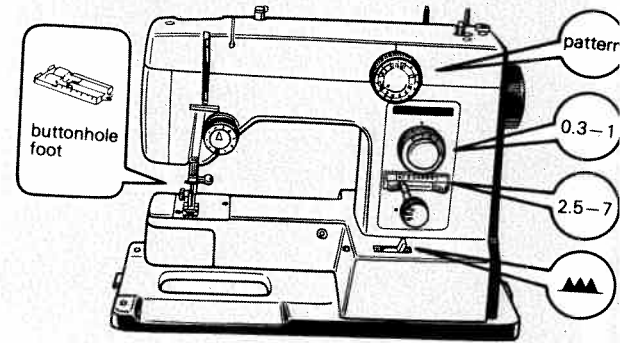
 pattern	5		6	7	8	9	10
							
 stitch length	<div>4</div> <div><del>below 3</del></div>						
 stitch width	0	3.5—7					
foot	 zigzag foot		 special foot		 <del>straight stitch foot</del>		

### (3) Buttonholes

For actual sewing, see p.31.



#### Machine setting

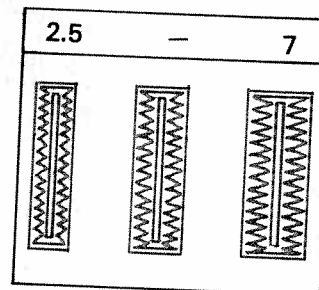
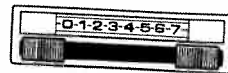


#### Pattern setting

Step	Pattern	Actual Stitch
1	 automatic	
2	 automatic	

#### Adjustment of stitch width

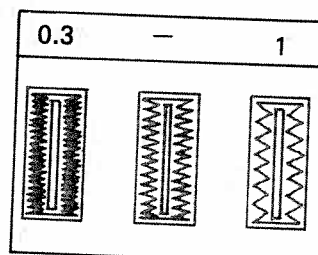
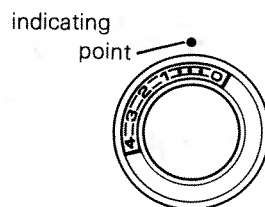
Decide the stitch width according to the size and the thickness of the button and the type of fabric.



Set within the orange colour.  
The bigger the number, the wider the stitch.

#### Adjustment of stitch length

Decide the stitch length according to the type of fabric.

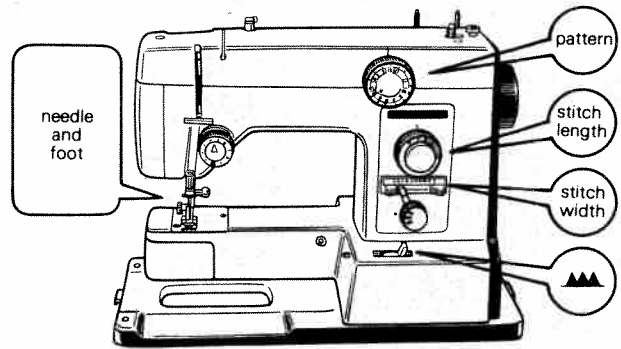
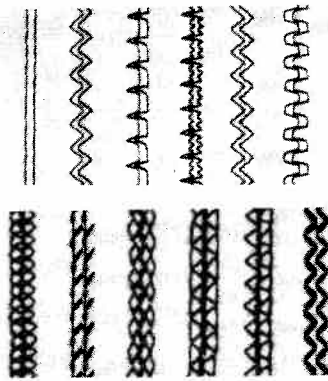


Set within the orange colour.  
The lower the number the closer the stitch.
















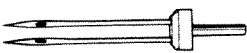
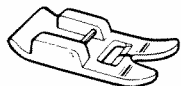
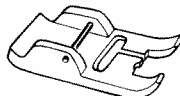
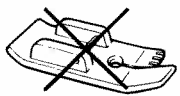
#### (4) Twin Needle Sewing

Enjoy attractive stitching with two different colour threads.

##### Machine setting

































































##### Pattern setting

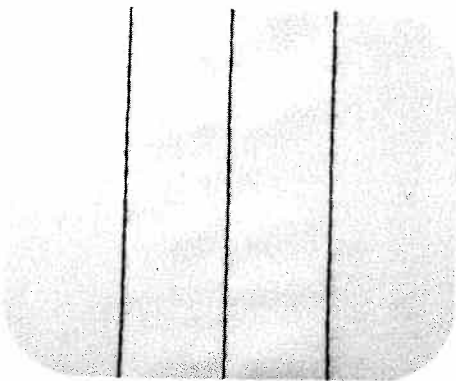
 pattern	M		1	2	3	4	5	6	7	8	9	10
												
 stitch length	1.5—4	0.3—4	1—2		0.5—1		4					
 stitch width	0	1—3.5					1—2.5					
		<del>above 3.5</del>										
needle	 twin needle											
foot	<div> zigzag foot</div> <div> special foot</div> <div> straight stitch foot</div>											

## 4. SEWING CHART

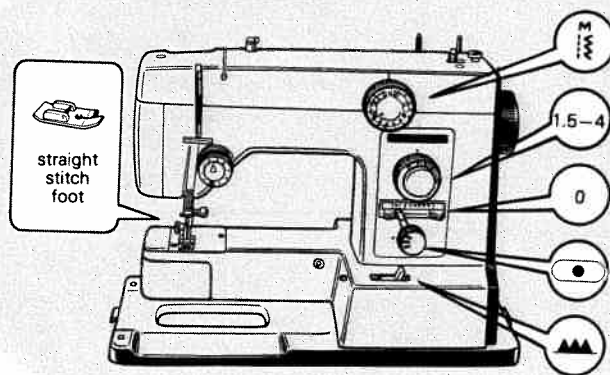
### Operation Guide

	M	1	2	3	4	5	6	7	8	9	10	1:2	Page
													
Straight Sewing													22
Zigzag Sewing													25
Elastic Sewing													27
Zipper Sewing													28
Overcasting													29
Overlocking													30
Buttonhole Sewing													31
Button Sewing													34
Blind hem Stitching													35
Mending													37
Attaching Elastic													41
Shell Stitching													42
Roll Hemming													43
Lapped Seam Sewing													45
Edge to Edge Stitching													47
Quilting													49
Pin Tucking													50
Smocking													51
Cording													52
Embroidery and Mono-gramming													53
Applique													55
<p> ... Explained in detail from the next page.</p> <p> ... Not explained but can also be used.</p>													

## Straight Sewing

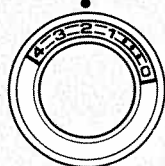


### Machine setting



### Adjustment of stitch length dial

indicating point



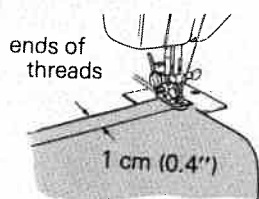
0	1	2	3	4
Very short stitch	Short stitch	Normal stitch	Long stitch	Very long stitch

For a long stitch, turn the dial clockwise. For a short stitch, turn it counter clockwise.

For normal sewing, it is set between 2 and 3.

### How to sew

#### Step-1



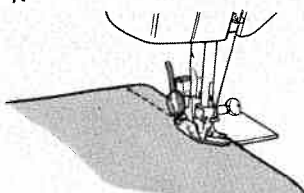
Place the fabric under the foot about 1cm (0.4") inside the edge.

Lower the presser foot.

Lower the needle by turning the handwheel toward you.

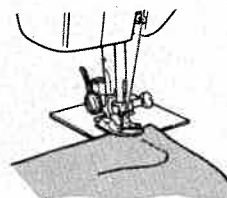
\* Leave the ends of the threads of about 15cm (6").

#### Step-3



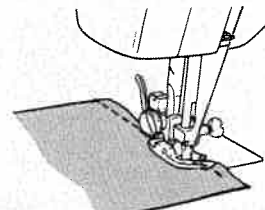
Guide the fabric by hand as it is fed. Never pull too hard on it.

#### Step-2



To reinforce the seam, sew reverse stitches to the edge of the fabric.

#### Step-4

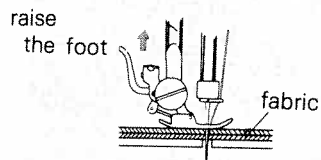


Sew reverse stitches for reinforcement at the finish.



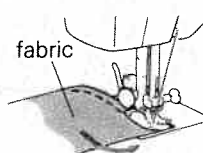
## Turning corners

### Step-1



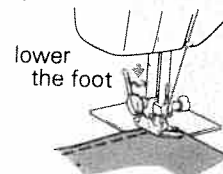
Stop sewing with the needle in the fabric at the pivot point. Raise the foot.

### Step-2



Turn the fabric.

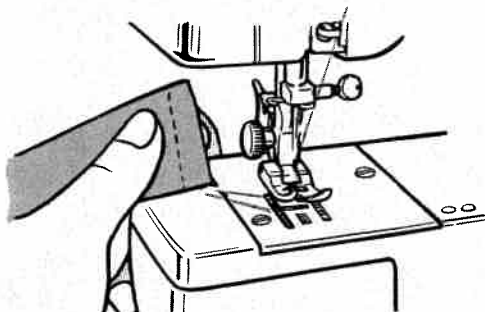
### Step-3



Lower the foot and start sewing.

## Removing fabric

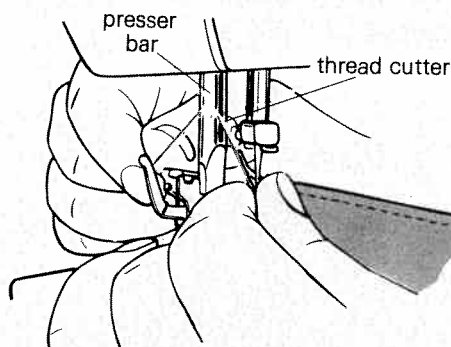
### Step-1



At the end of sewing, raise the needle to its highest position.

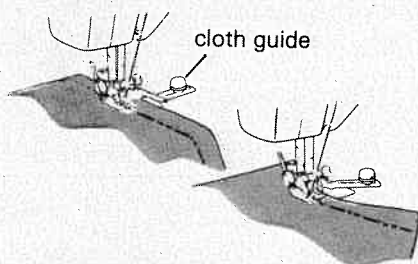
Raise the foot to release and remove the fabric by pulling it to the left.

### Step-2



Cut the both threads together with the thread cutter behind the presser bar as shown.

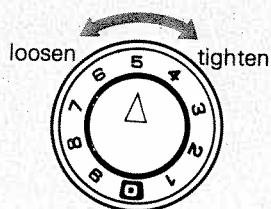
## Cloth guide



- (1) Use the cloth guide to sew a seam with a certain interval from the edge. Set the guide in the hole of the arm, right to the needle plate, and adjust the distance.
- (2) Run the machine with the edge of the fabric touching the guide.

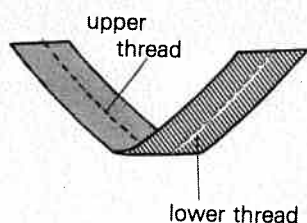
## Adjusting thread tension

### Upper thread tension dial

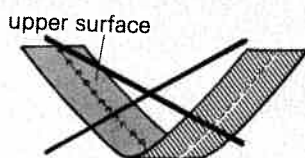


In most cases, a suitable tension can be obtained easily only with the adjustment of the upper thread tension dial.

### Correct tension

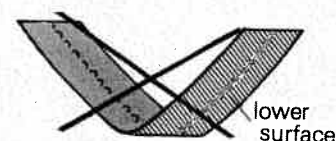


### Upper thread tension too loose



The upper thread lies straight along the upper surface of the fabric.

### Upper thread tension too tight



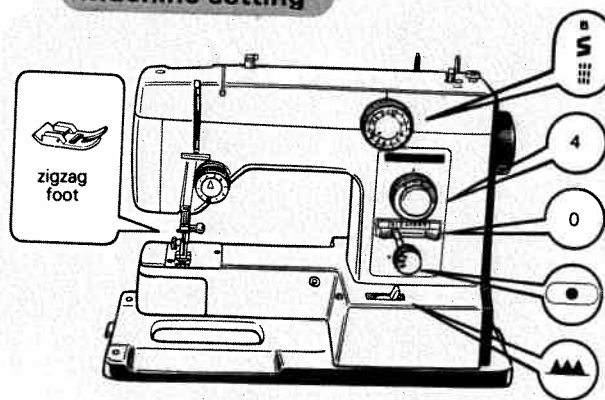
The lower thread lies straight along the lower surface of the fabric.

\* When sewing a very thin fabric, loosen the lower thread tension a little. (See p.13)

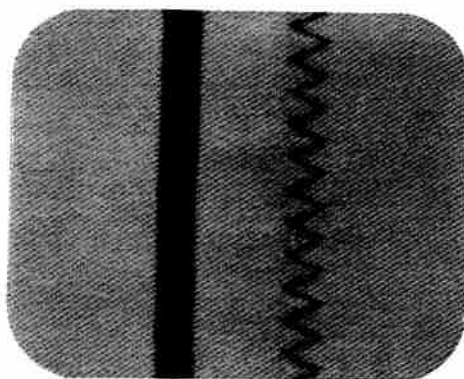
## With reverse straight stitch



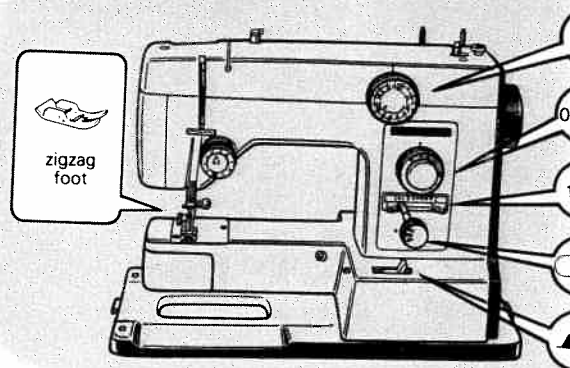
## Machine setting



# Zigzag Sewing

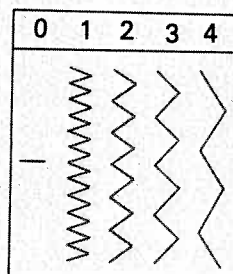
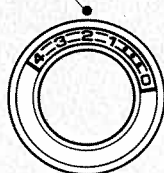


## Machine setting



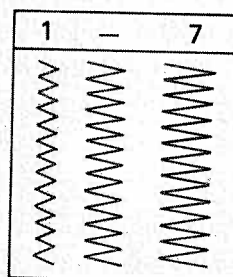
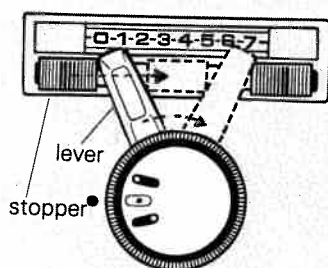
## Adjustment of stitch length dial

indicating point



For a long stitch, turn the dial clockwise. For a short stitch, turn it counterclockwise.

## Adjustment of zigzag width control lever



For a wide stitch, turn the lever toward 7.

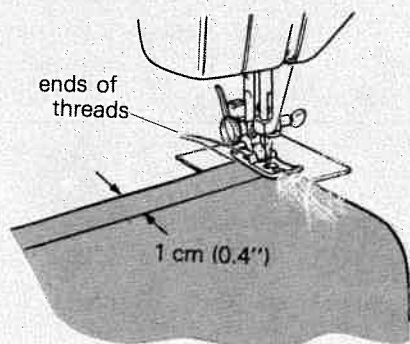
For a narrow stitch, turn it toward 0.

Move zigzag width control lever to a desired position, then lock it with the stopper.

\* The stopper can be set by pressing in slightly and sliding to a desired position.

## How to sew

### Step-1



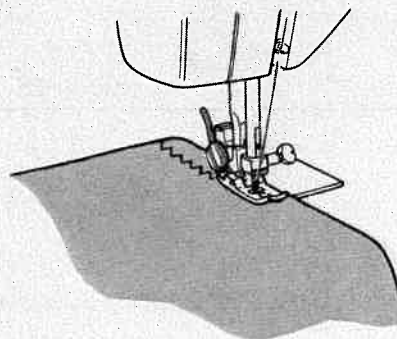
Place the fabric under the foot about 1cm (0.4") inside the edge.

Lower the presser foot.

Lower the needle by turning the hand wheel toward you.

\* Leave the ends of the threads of about 15cm (6").

### Step-2



Guide the fabric by hand as it is fed.

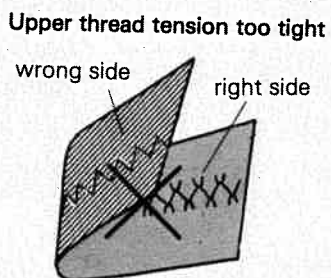
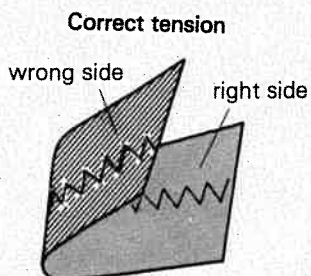
Never pull too hard on it.

To reinforce the seam, set the machine for the straight stitch and sew in reverse at the beginning and the ending of the seam.

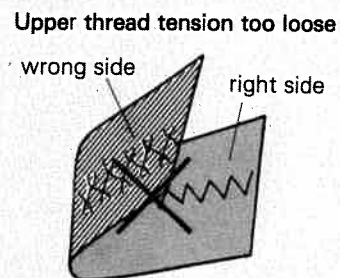
## Thread tension for zigzag stitch

For better appearance, the upper thread should be slightly visible in the wrong side of the fabric.

Loosen the upper thread tension a little more than when sewing with the straight stitch.



The lower thread appears in the right side of the fabric.



The upper thread appears too much in the wrong side of the fabric.

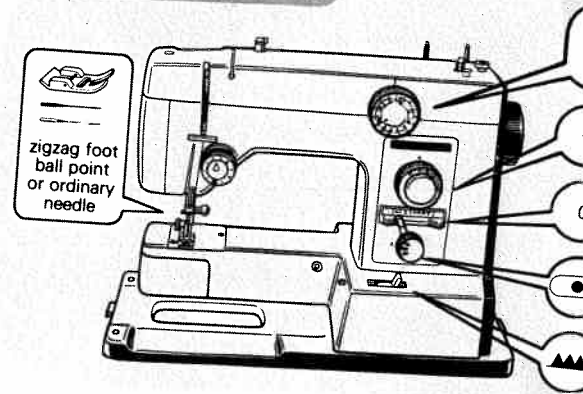
## Elastic Sewing

Excellent for seaming elastic materials.

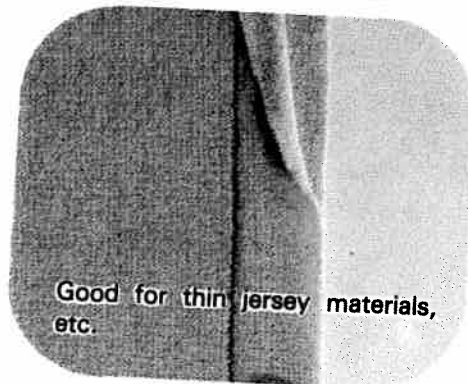
### With reverse straight stitch



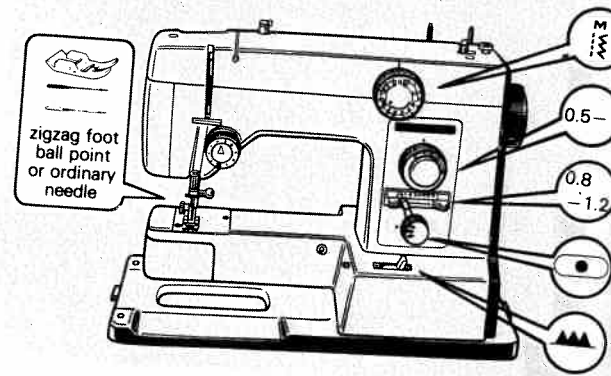
### Machine setting



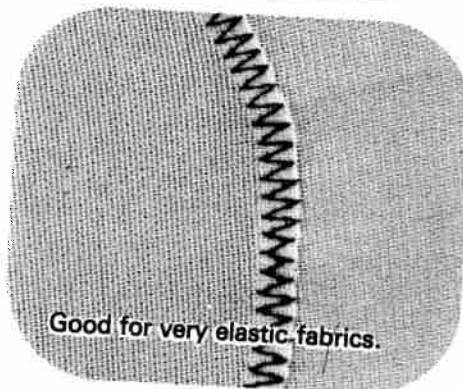
### With small zigzag stitch



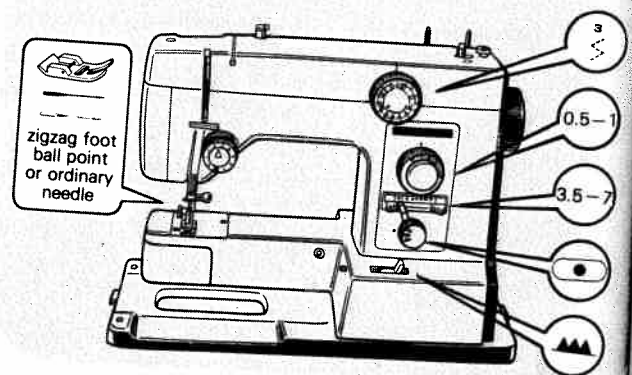
### Machine setting



### With multiple zigzag



### Machine setting



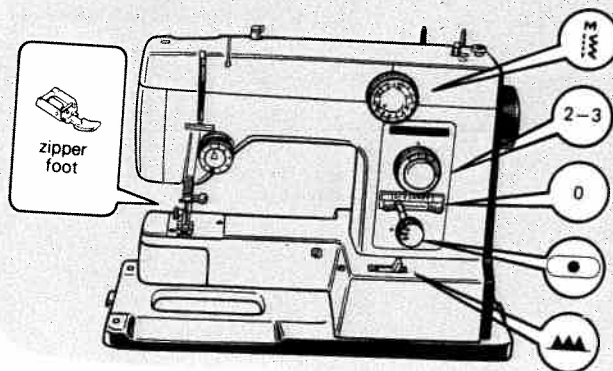
\* Weaken the pressure of the presser foot for very elastic materials.



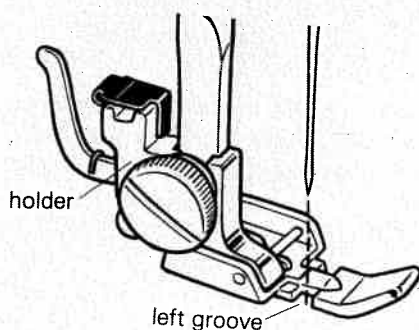
## Zipper Sewing

With the specially designed zipper foot, zipper sewing can be done easily.

### Machine setting

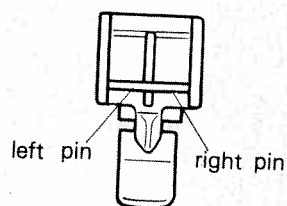


### Setting zipper foot



To sew the right side of the zipper.

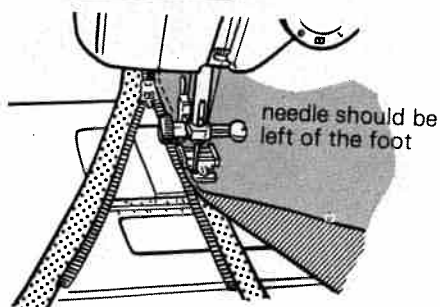
Set the holder in the left pin. The needle comes to the left groove.



To sew the left side of the zipper.

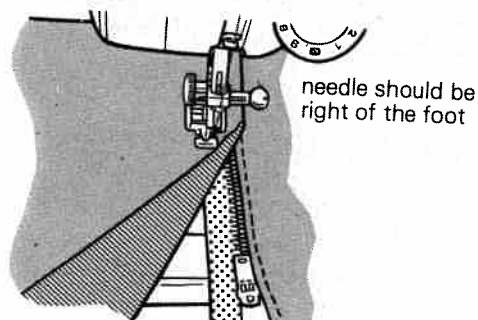
Set the holder in the right pin. The needle comes to the right groove.

### How to sew



When sewing the right side, place the zipper under the left side of the foot.

Sew carefully beside the right side teeth of the zipper, guiding the fabric.



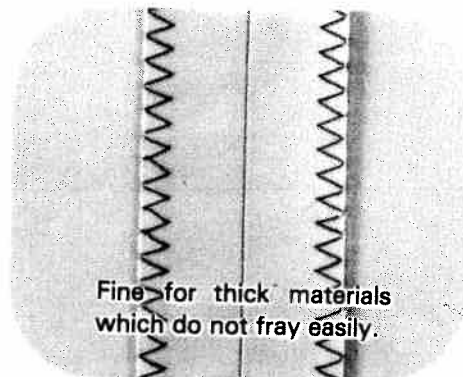
When sewing the left side, place the zipper under the right side of the foot.

Sew carefully beside the left side teeth of the zipper, guiding the fabric.

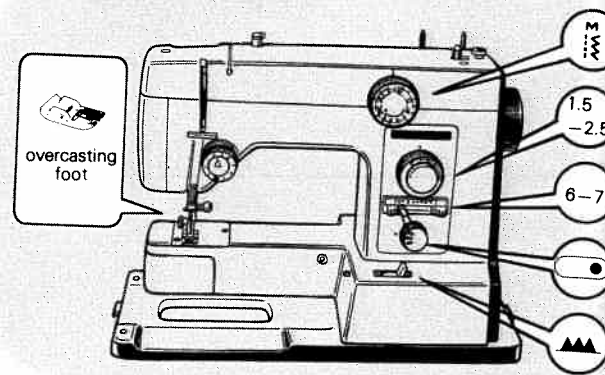
## Overcasting

It is used for the settlement of margins to seam or to cut.

### With zigzag stitch

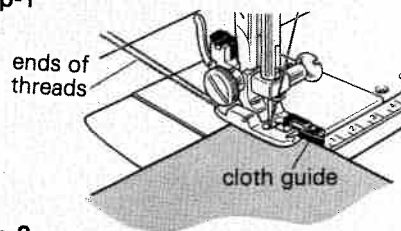


### Machine setting



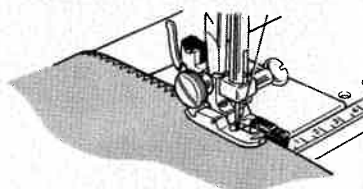
### How to sew

#### Step-1



Position the ends of the threads behind the foot. Place the edge of the fabric against the cloth guide of the overcasting foot and lower the foot.

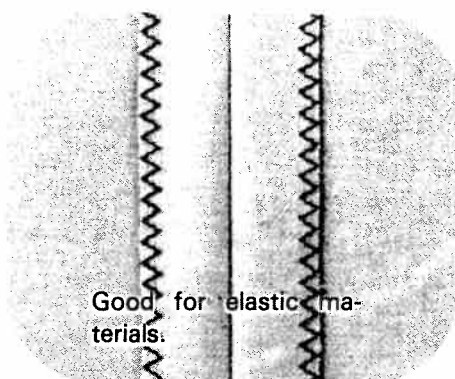
#### Step-2



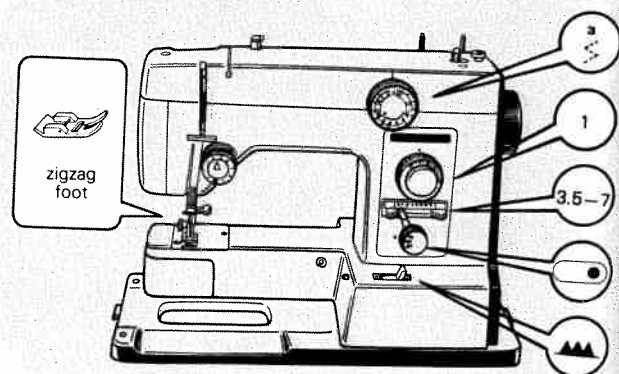
Sew carefully, guiding the right edge of the fabric along the cloth guide so that the needle goes slightly off the edge of the fabric.

\* When overcasting with the stitch width below 5, use special foot and blind hem stitch guide.

### With multiple zigzag



### machine setting

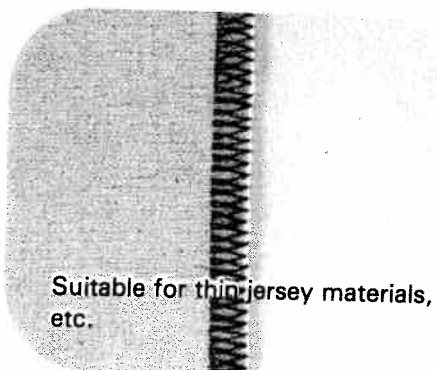


\* Weaken the pressure of the presser foot for very elastic materials.

## Overlocking

Overlocking stitches can sew seams and finish them in one operation.

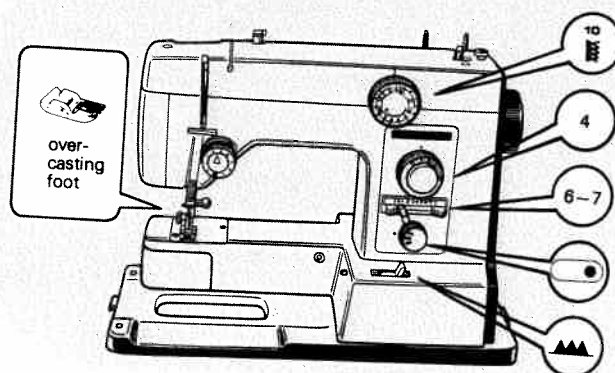
### With cross-over-edge stitch



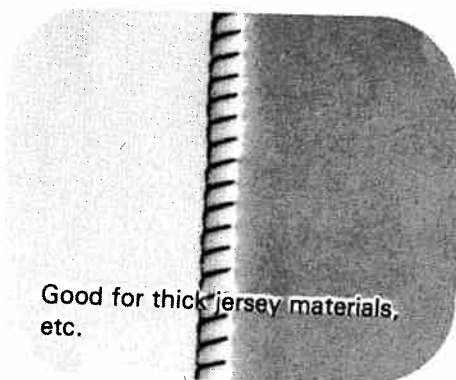
### How to sew

Sew in the same way as overcasting.

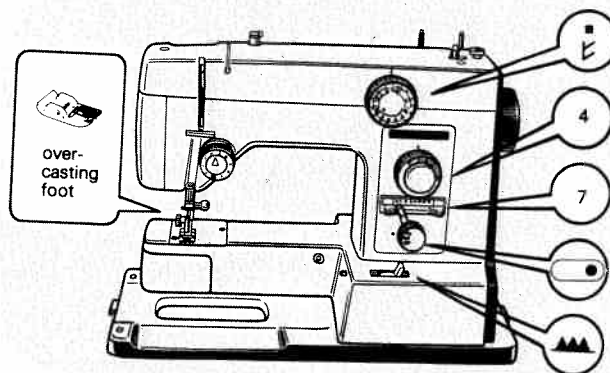
### Machine setting



### With blind-over-edge stitch



### Machine setting

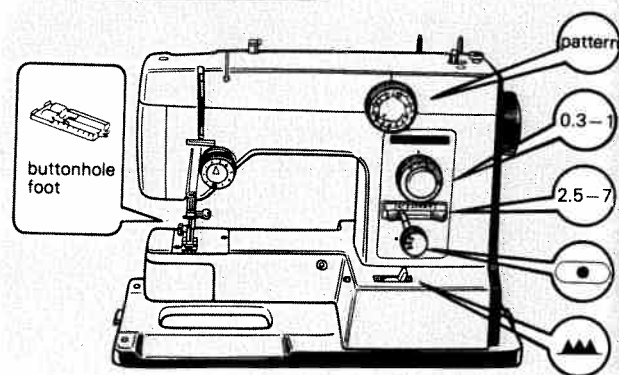
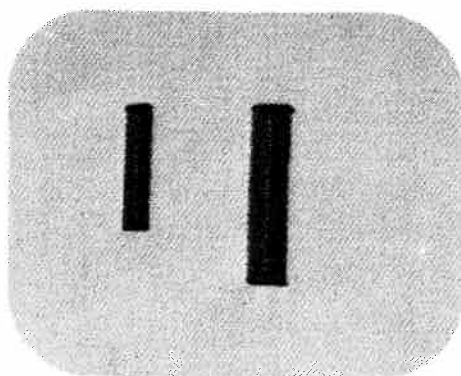








## Buttonhole Sewing


Buttonholes are easy for children's clothes, shirts, blouses, etc.

### Machine setting



### Pattern setting

Step	Pattern	Actual Stitch
1	 automatic	
2	 automatic	

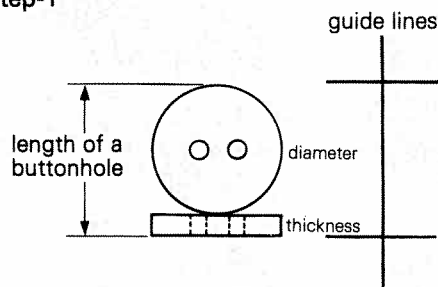
\* When setting pattern , the stitch is sewn from the front to the back.

**Adjustment of stitch width, Adjustment of stitch length** .... see p. 19.

### How to sew

It is recommended to sew a testing sample first with the same fabric as the garment.

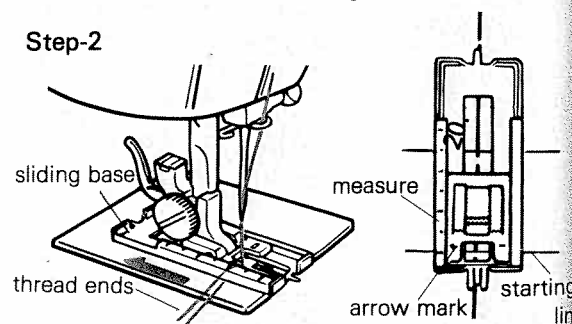
#### Step-1



Mark guidelines on the fabric where the buttonhole to be sewn.

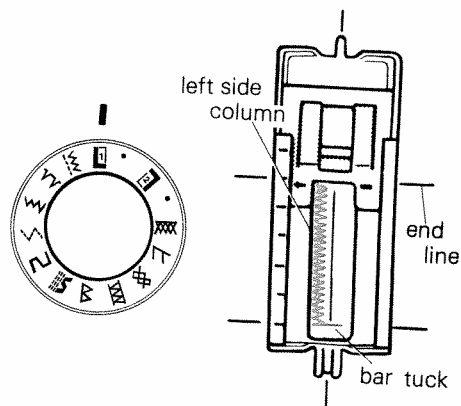
The diameter of the button plus its thickness tells you the right length for a buttonhole.

#### Step-2



- (1) Place the upper thread under the foot passing through the cut square of the foot. Pull both thread ends about 15cm (6").
- (2) Push back the sliding base as far as it will go. Match the starting line on the fabric with the arrow mark on the foot.

### Step-3



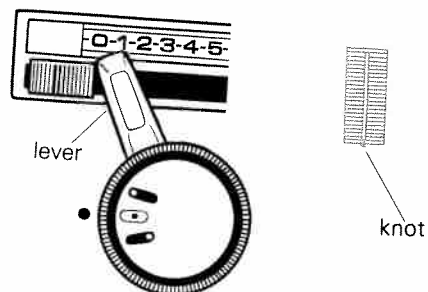
- (1) Set pattern selector dial **1** and start sewing.

You will hear the click sound for the bar tuck first. Then the machine automatically starts sewing the left side column from the front to the back.

- (2) When the arrow mark of the foot meets the end line, stop sewing.

\* When making same-size buttonholes, memorize the point where the arrow shows so that it is not necessary to mark the end lines for all the buttonholes.

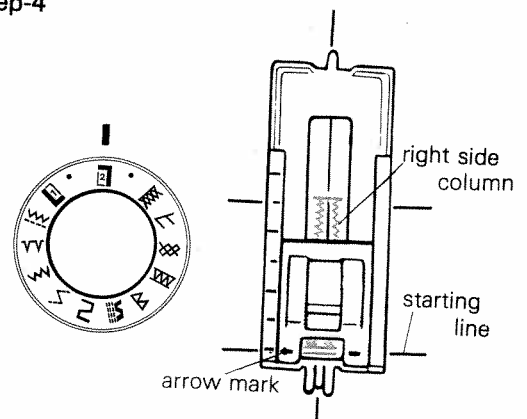
### Step-5



- (1) Turn the lever to the "0" position.
- (2) Sew 5 or 6 stitches to make a knot.

\* When sewing buttonholes on stretch fabrics, it is recommended to insert interlining between the fabrics to obtain a better stitch.

### Step-4

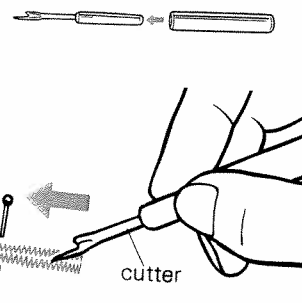


- (1) Set pattern selector dial **2** and start sewing.

After sewing the bar tuck with the click sound, the machine automatically starts sewing the right side column from the back to the front.

- (2) When the arrow mark of the foot comes back to the starting line, stop sewing.

### Step-6

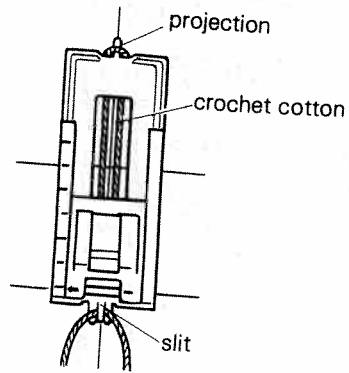


Cut the buttonhole in the middle by pushing the cutter forward.

\* Use a needle to avoid over cut as shown.

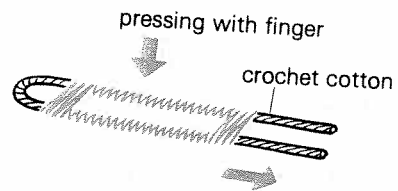
## Corded buttonholes

To reinforce the buttonhole, especially for knits, a corded buttonhole is useful.

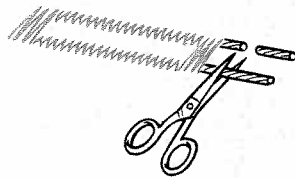


(1) Hook a kind of crochet cotton to the projection on the buttonhole foot, and to the slit to hold both ends.

(2) Sew in the same way as an ordinary buttonhole.



(3) After finishing sewing, pull the ends of the cord so that the loop of the cord on the other side disappears into the buttonhole stitching.



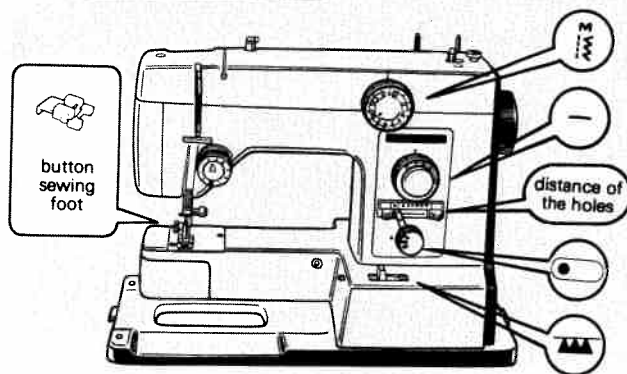
(4) Cut both ends of the crochet cotton.

— NOTE —

## Sewing on Buttons

With the specially designed two-step foot lifter, even thick buttons can be sewn easily.

### Machine setting

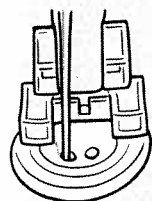


### How to sew

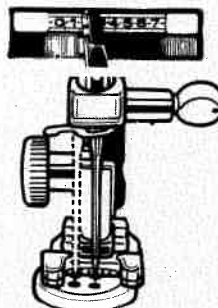
#### Step-1



- (1) Set the zigzag width at "0".
- (2) Place the button so that the needle lowers into the left hole.
- (3) Lower the presser foot.

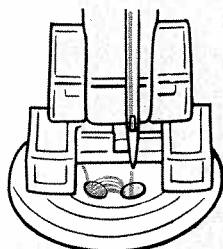


#### Step-2



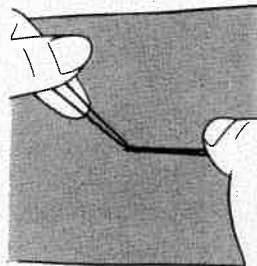
- (1) Turn the handwheel until the needle comes up above the button.
- (2) Set the zigzag width so that the needle is positioned right above the right hole.

#### Step-3

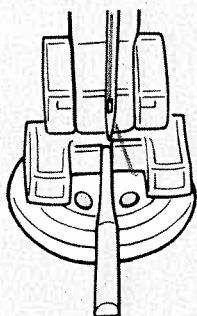



- (1) Sew the button on.
- (2) Draw out the work and cut off the thread ends with 10cm (4") left.

#### Step-4



Draw the thread ends through to the wrong side and tie a knot.

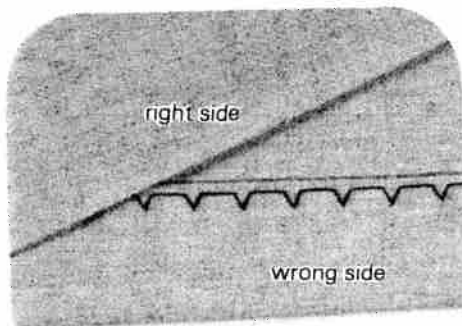


If a shank is required, insert a needle in the centre of the presser foot and sew over it. Re-set the needle position at the  mark.

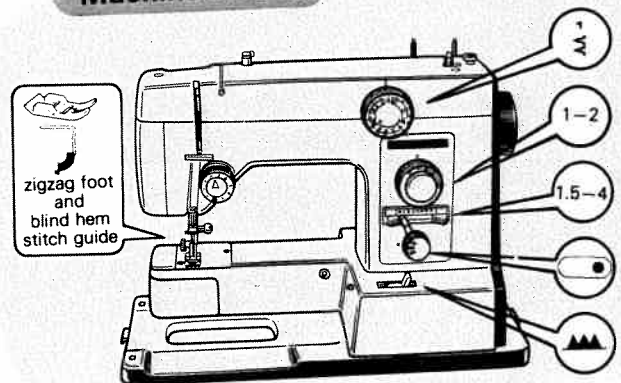
## Blind Hem Stitching

Superb for hemming skirts, trousers, suits, etc., without the stitches showing on the right side of the fabric.

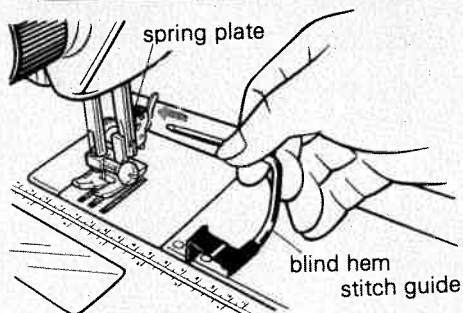
### With blind hem stitch



### Machine setting

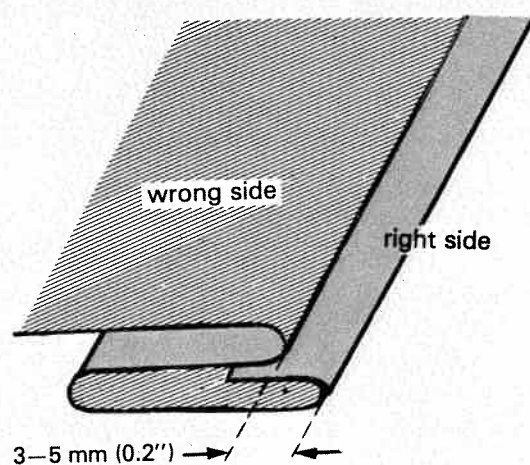


### Setting blind hem stitch guide



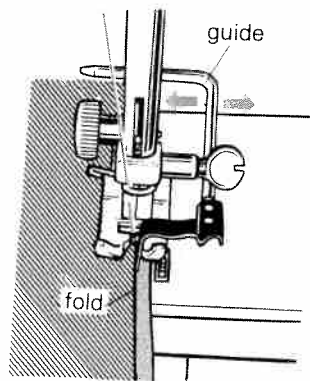
Insert the blind hem stitch guide under the spring plate on the foot holder.

### Folding the fabric



Fold the fabric as shown.

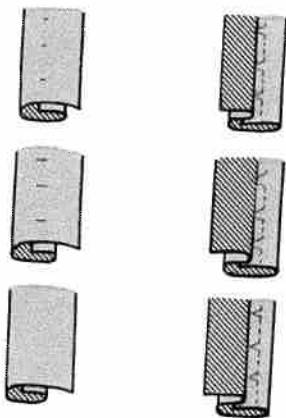
## How to sew



- (1) Turn the handwheel by hand and when the needle goes to left side, position the fabric where the needle slightly catches the edge of the fold.
- (2) Adjust the guide to touch the fold of the fabric perfectly.
- (3) Sew carefully guiding the folded edge together with the guide.

right side

wrong side



Correct seam.

The needle is catching the edge of the fold too much.

The needle is not catching the edge of the fold at all.

For a neater finish, it is preferable to do basting or ironing beforehand.

## With elastic blind hem stitch

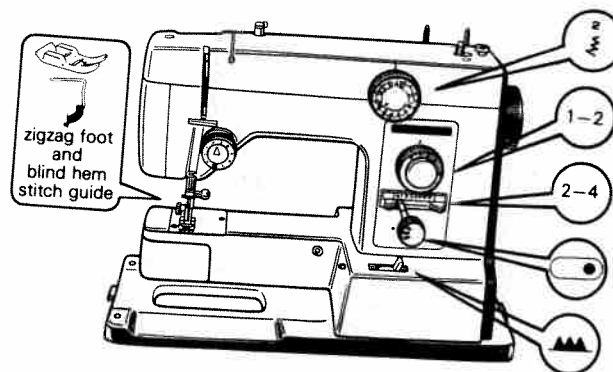
right side



wrong side

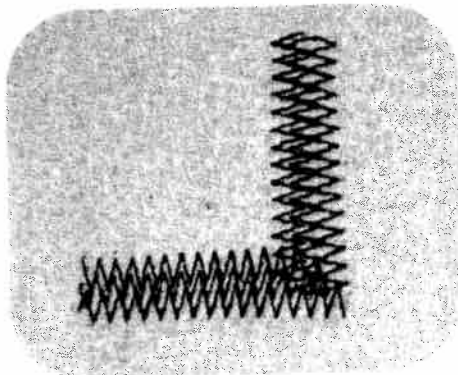
Suitable for elastic materials.

## Machine setting

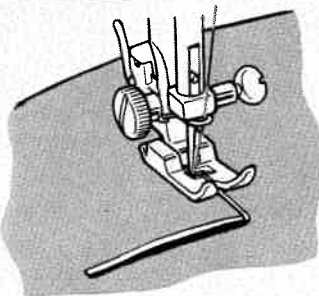


## Mending

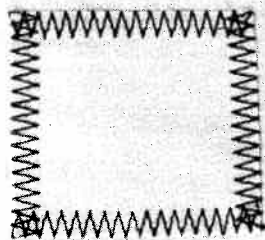
### (1) Mending a rip



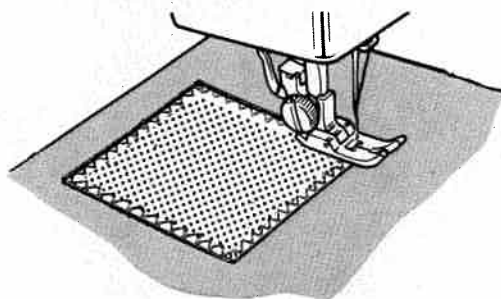
#### How to sew



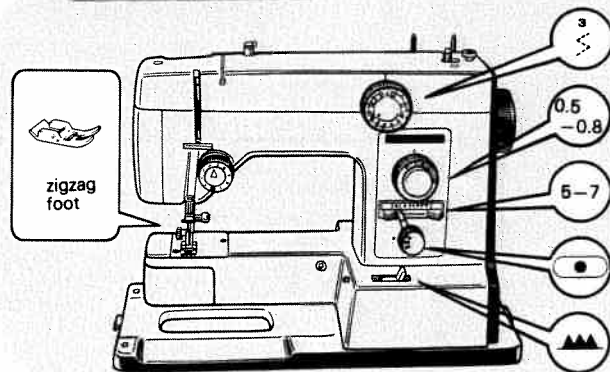
### (2) Patching



#### How to sew



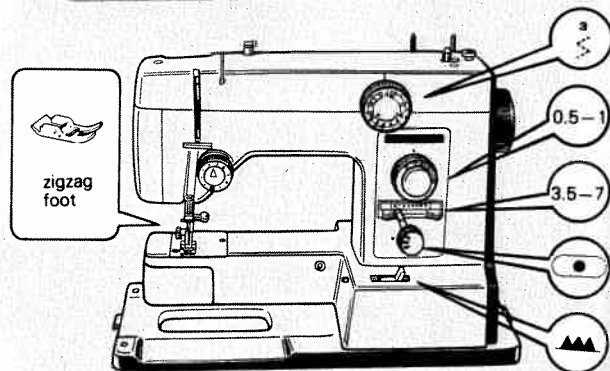
#### Machine setting



- (1) Sew the edges of the fabric together as shown.
- (2) Sew 2 more stitches at the side parallel with the first stitch.

\* If necessary, reinforce the rip with a piece of fabric on the back side.

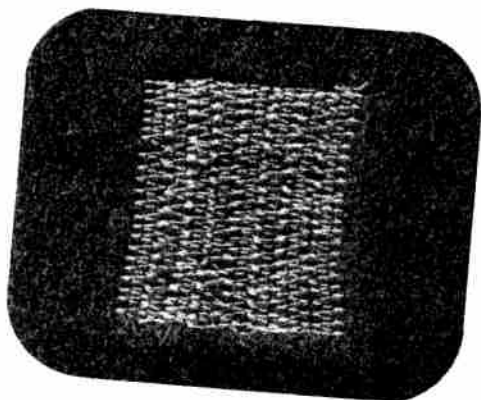
#### Machine setting



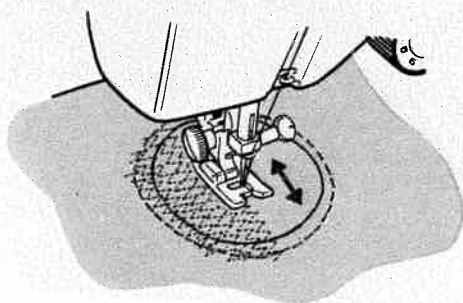
- (1) Cover the worn part completely with a piece of the same material as the fabric.
- (2) Sew along the edge of the patching material from the right side.
- (3) Trim away the worn part from the back side up to about 0.5—1 cm (1.3" — 2.5") from the stitching.



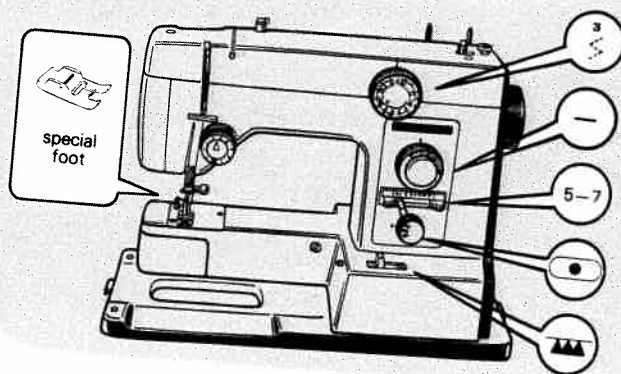
### (3) Mending a big hole



#### How to sew

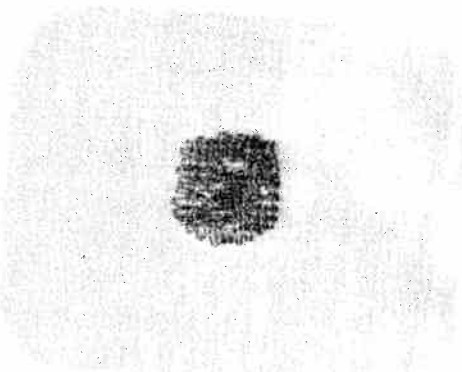


#### Machine setting

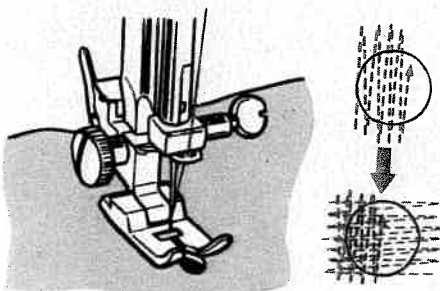


- (1) Set presser foot pressure control dial to the "0" position.
  - (2) Place a piece of fabric on the back side of the hole.
  - (3) Sew over the patching area by moving the fabric back and forth by hand.
- \* It is recommended to sew around the hole first with straight stitch to prevent the hole from getting bigger.

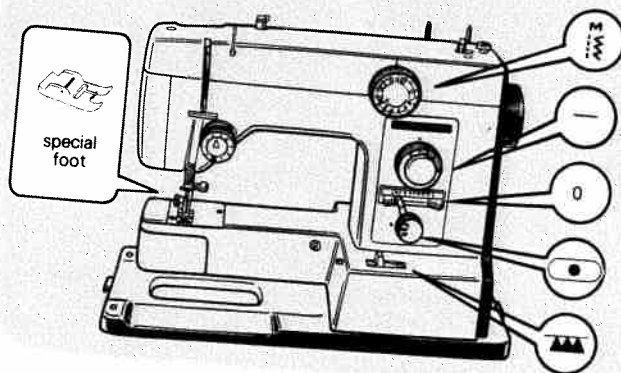
### (4) Mending a small hole



#### How to sew



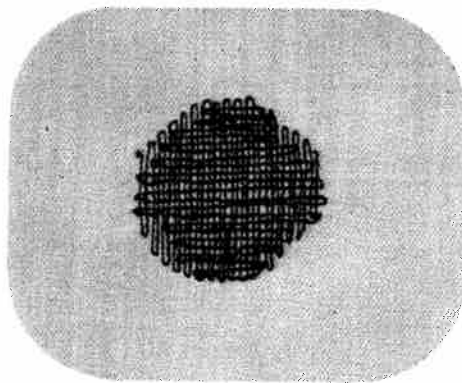
#### Machine setting



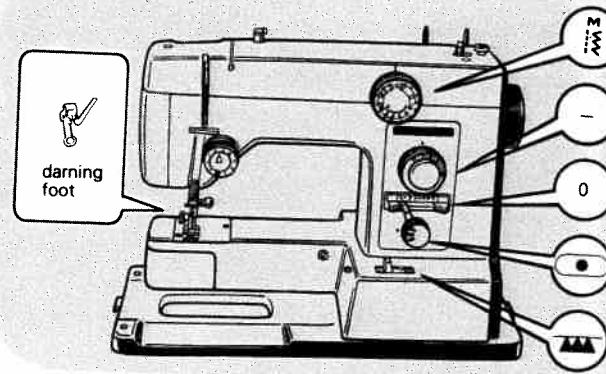
- (1) Set presser foot pressure control dial to the "0" position.
- (2) Sew over the hole by moving the fabric back and forth by hand.
- (3) Turn the material 90° and sew again over the hole in the same way.



## (5) Darning 1...Using a hoop



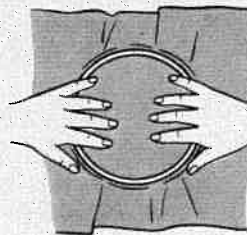
### Machine setting



To attach darning foot, see p.8.

### How to sew

#### Step-1

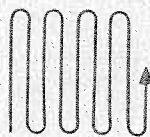


Stretch the fabric on the hoop with the worn-out part in the center.

Hold the hoop correctly as shown.

Place the upper thread under the foot passing through the hole of the foot.

#### Step-2

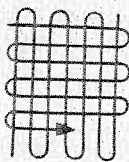


Sew over the worn-out part, guiding the hoop back and forth by hand.

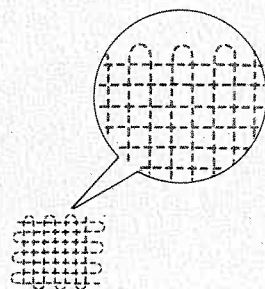
Making stitches closely spaced gives a better finish.

\* Be sure the presser foot is lowered.

#### Step-3



Turn the fabric 90° and sew in the same way.



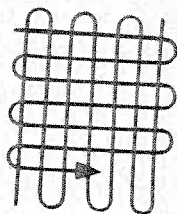
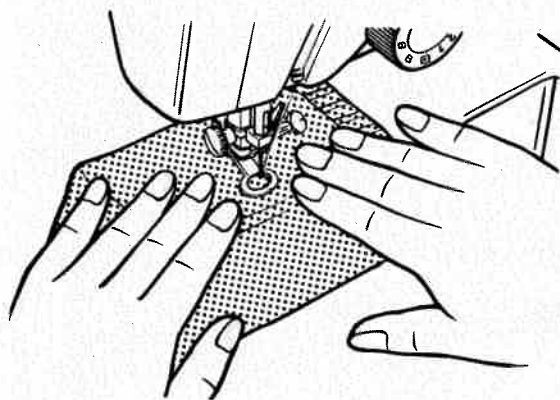
\* By making the turning points blunt, the darned part becomes softer and more flexible.

## (6) Darning 2...Using free-arm

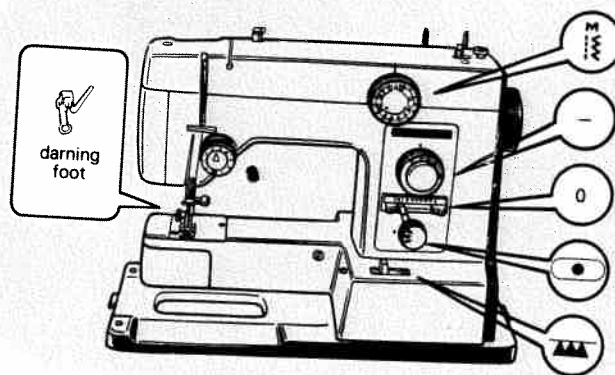


Darning tubular articles.

### How to sew



### Machine setting



To attach darning foot, see p. 8.

- (1) Remove the extension table for free-arm sewing.
- (2) Place the upper thread under the foot passing through the hole of the foot.
- (3) Loop the article onto the free-arm.
- (4) Place your fingers as close as possible to the darned part.

- (5) Sew the darned part vertically, guiding the fabric with your fingers.
- \* Be sure the presser foot is lowered.

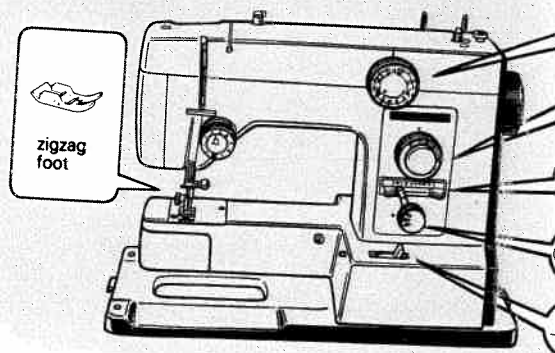
- (6) Sew the darned part horizontally, guiding the fabric with your fingers.

\* Elastic materials can be darned easily by stretching the worn-out part with your fingers while sewing.

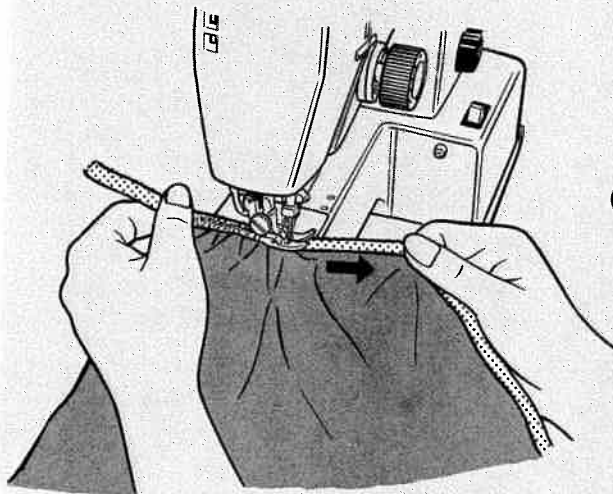
## Attaching Elastic

Elastic can be easily attached to sleevebands, skirt waists, etc.

### Machine setting



### How to sew

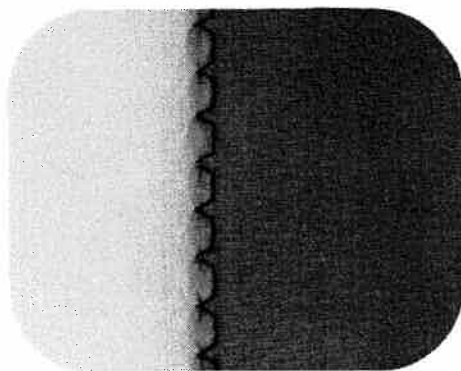


- (1) Place the elastic on the fabric and lower the foot. Sew 4 or 5 stitches.
- (2) Sew along the center, pulling the elastic evenly both in front and behind the presser foot.

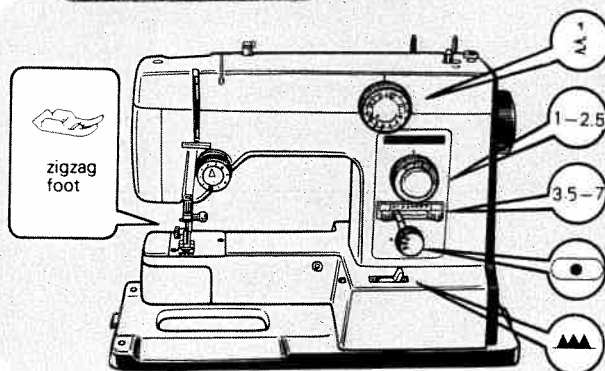
— NOTE —

## Shell Stitching

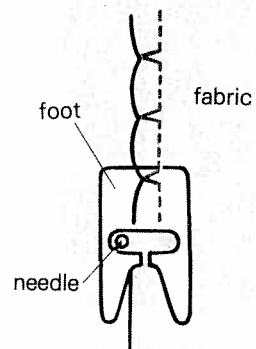
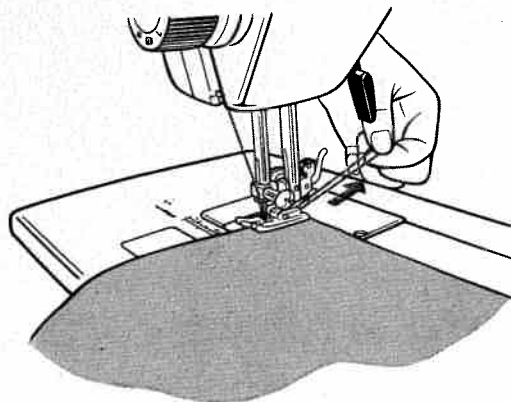
The stitch gives an attractive trim to children's clothes, blouses, negligees, etc.



### Machine setting



### How to sew



- (1) With the folded edge to left, place the fabric under the presser foot in the position where the needle sews just off the outer edge of the fabric.
- (2) Start sewing, pulling the both thread ends away from you by hand.

\* For better appearance;

Tighten the upper thread tension a little.

Use thin, elastic fabrics.

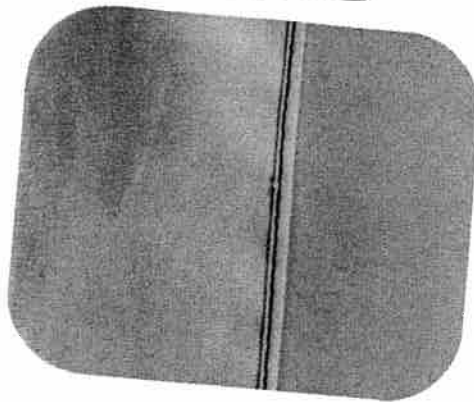
Use cloth on the bias.

## Roll Hemming

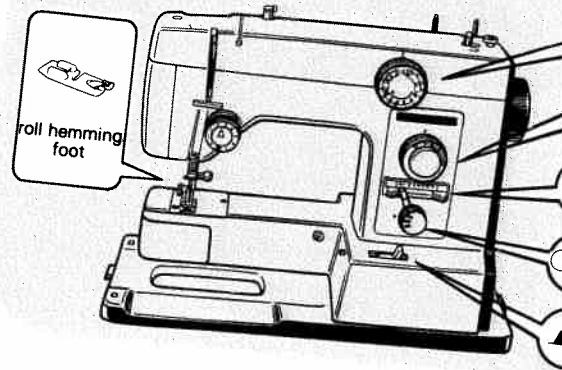
The hemmer is convenient when you wish to sew long hems in the fabric such as shirts, blouses, aprons, etc.

M  
(1)

### With straight stitch

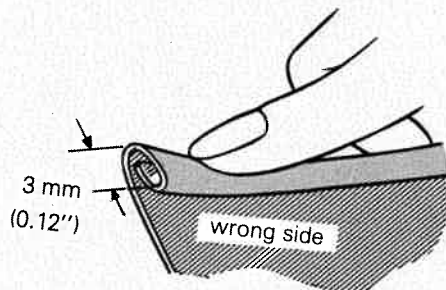


### Machine setting



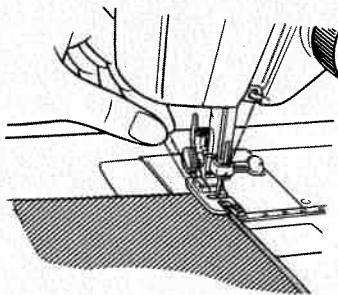
### How to sew

#### Step-1



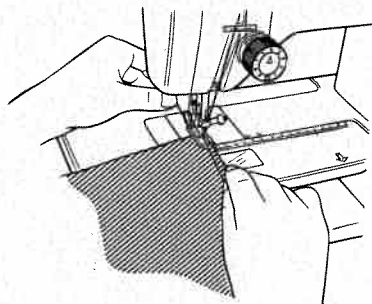
Make a double 3mm (0.12") fold for about 5cm (2") along the edge of the fabric to be hemmed.

#### Step-2



- (1) Place the folded edge under the presser foot.
- (2) Put the needle in the center of the hem and lower the presser foot.
- (3) Sew a few stitches pulling both thread ends away from you by hand.

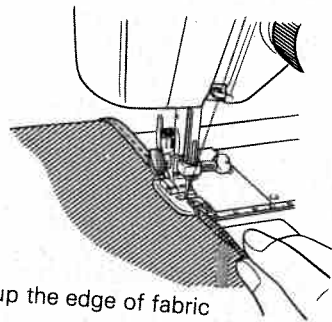
#### Step-3



- (1) Raise the foot with the needle down in the fabric.
- (2) Insert the folded edge into the mouth of the foot.



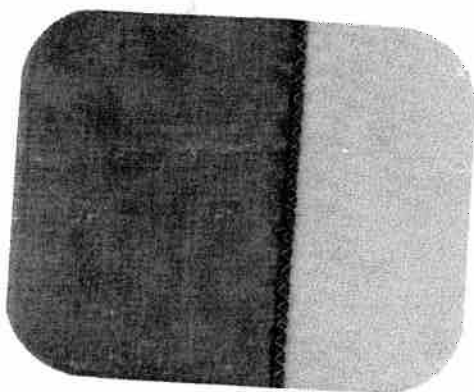
#### Step-4



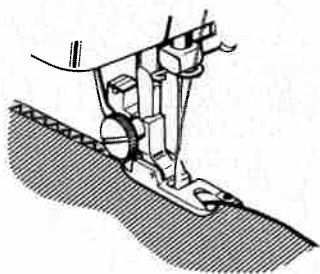
Lower the presser foot and continue to sew.

\* By lifting up the edge of the fabric a little, the foot easily feeds the fabric without sliding it out.

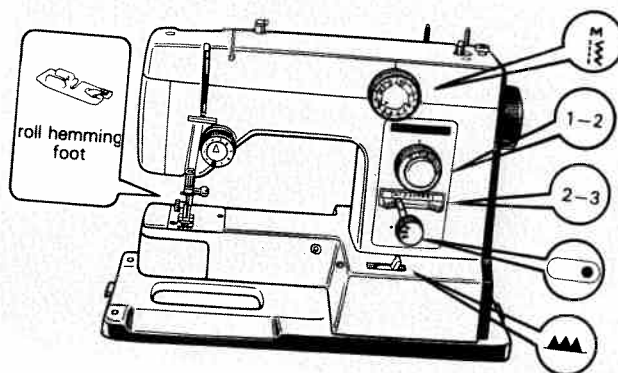
#### With zigzag stitch



#### How to sew



#### Machine setting



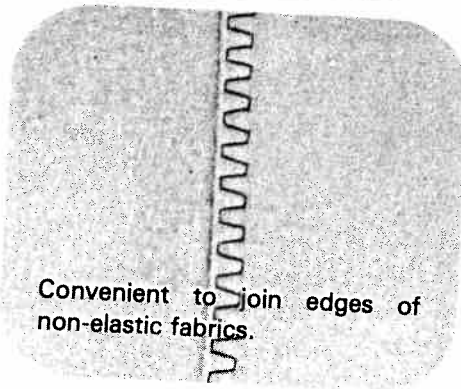
Sew in the same way as the roll hemming with straight stitch.

\* Do not do roll hemming with excessively thick fabrics like heavy denims, or with very elastic fabrics such as jerseys, knits, etc.

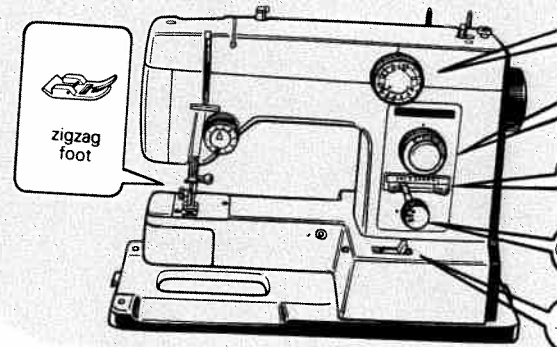
## Lapped Seam Sewing

Lapped seams can be sewn easily in one operation.

### With double action stitch

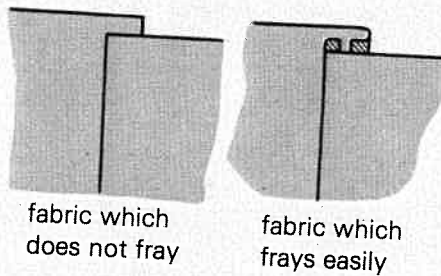


### Machine setting



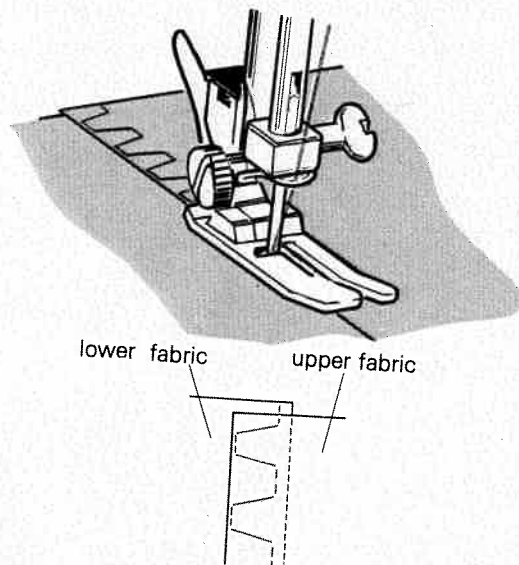
### How to sew

#### Step-1



Place one piece over another as shown.

#### Step-2

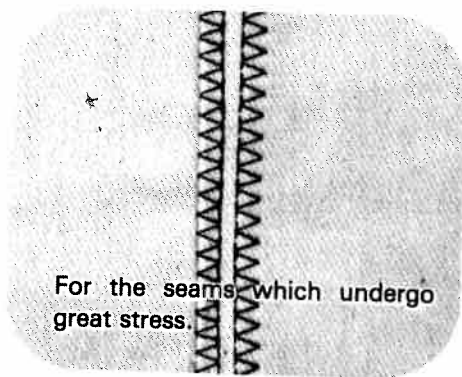


Sew over the folded area from the right side of the fabric.

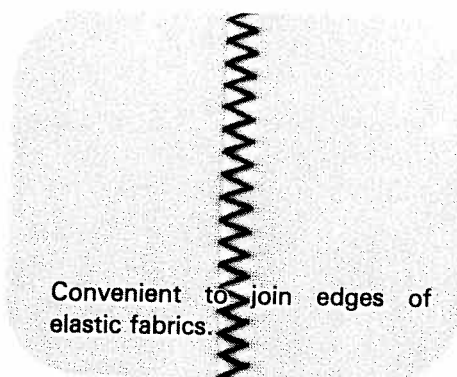
On the left, the needle comes slightly inside the upper fabric.

On the right, the needle comes slightly inside the lower fabric.

### With over-edge stitch

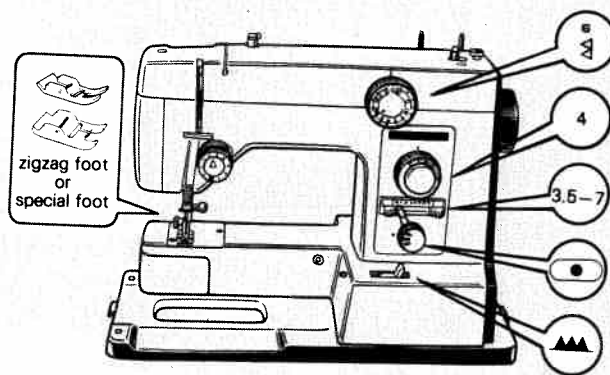


### With rick rack stitch

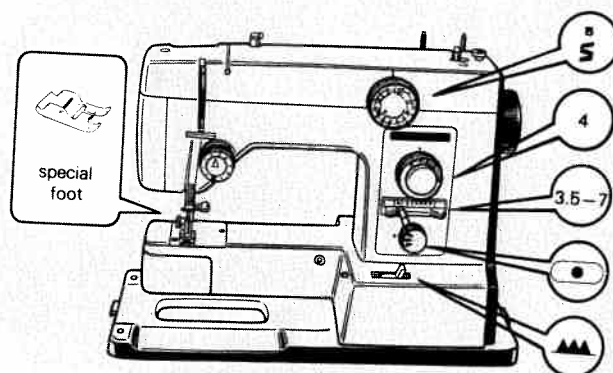


— NOTE —

### Machine setting



### Machine setting

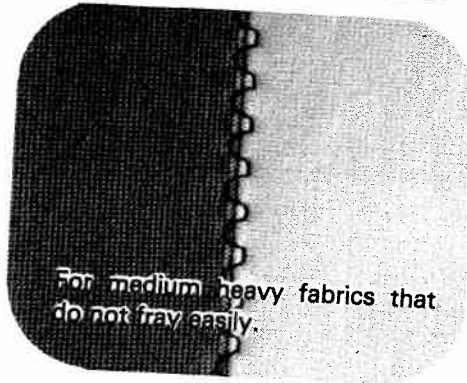




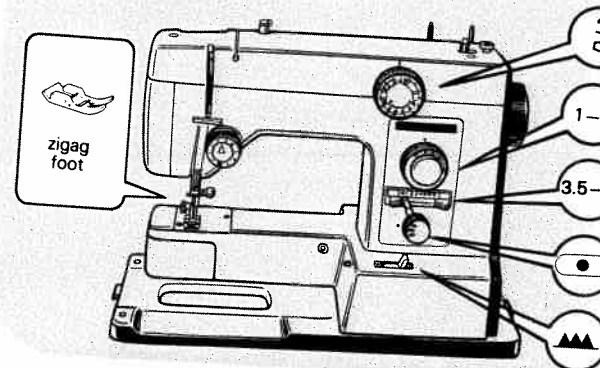
## Edge to Edge Stitching

To join the edges of the fabric.

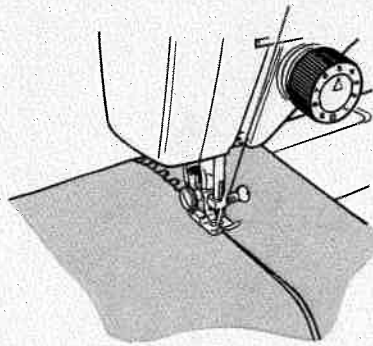
### With double action stitch



### Machine setting

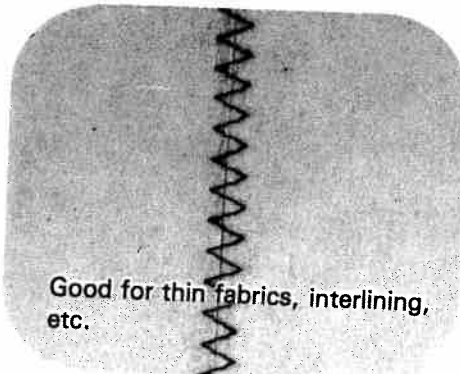


### How to sew

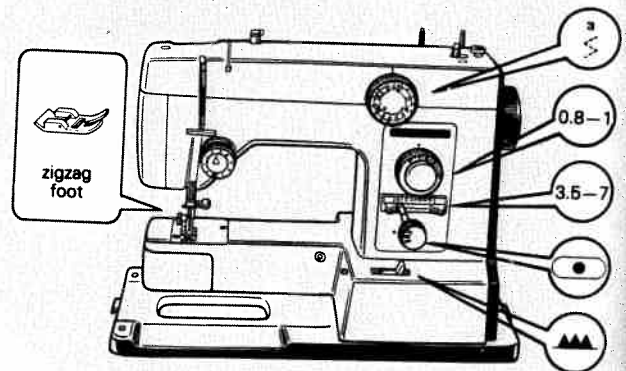


Sew carefully, keeping the line where the fabrics come together in the center of the foot.

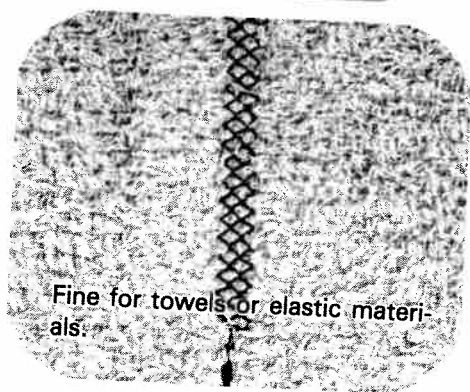
### With multiple zigzag stitch



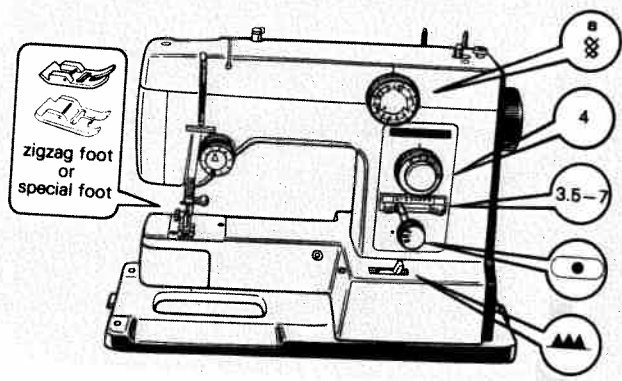
### Machine setting



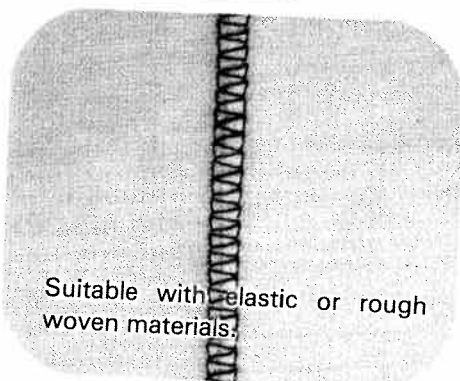
**With honey-comb stitch**



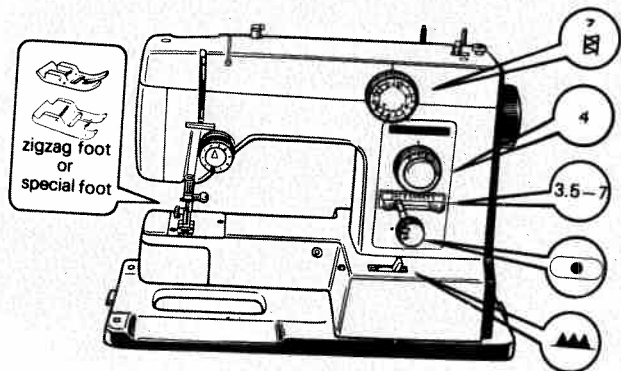
**Machine setting**



**With edge stitch**



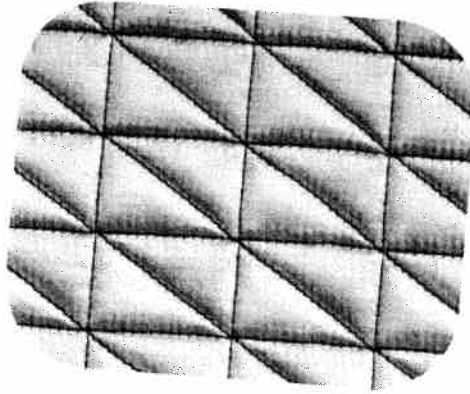
**Machine setting**



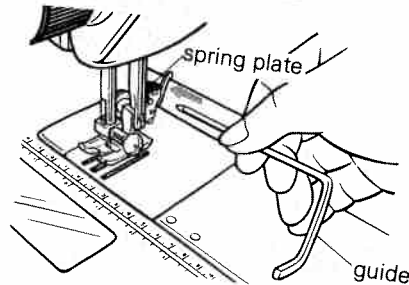
— NOTE —

## Quilting

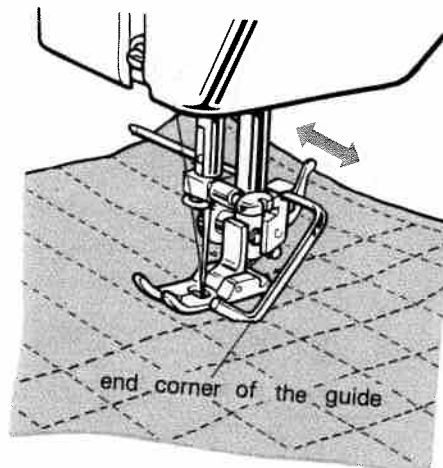
Machine quilting is easy and fun. Just sandwich polyester or lamb's wool lining (batting) between the fashion fabric and a backing of a light weight firmly woven fabric and sew a way



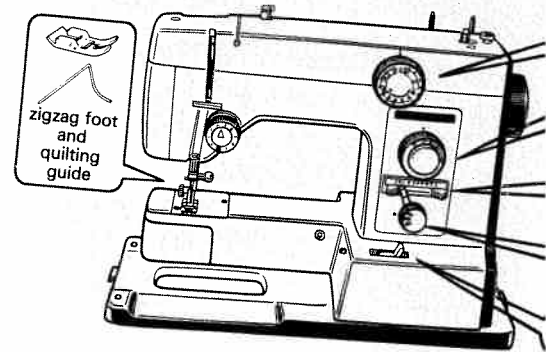
### Setting quilting guide



### How to sew



### Machine setting



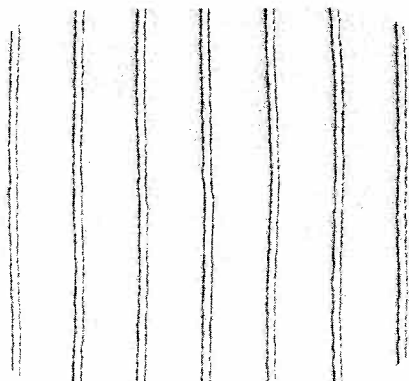
Insert the quilting guide under the spring plate on the holder.

Seams at regular interval are easily obtained with the quilting guide without marking the lines.

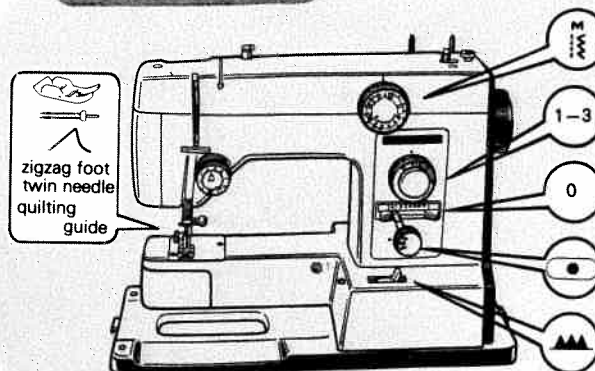
- (1) Baste to avoid misaligning.
- (2) Draw the first line on the fabric with a pencil or tailor's chalk and sew along the mark.
- (3) Adjust the space between the seams by moving the guide in the arrow direction.
- (4) Sew with the guide along the previous stitching line.

## Pin Tucking

Pin tuck stitching is used to obtain delicate tucks on the front or sleeves of blouses, one-piece dresses, etc.

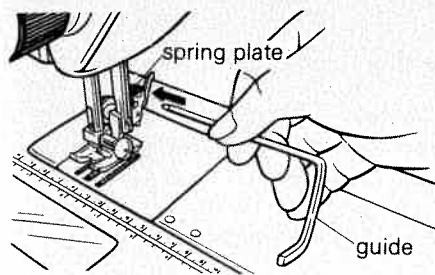


### Machine setting



To thread twin needle, see P.17.

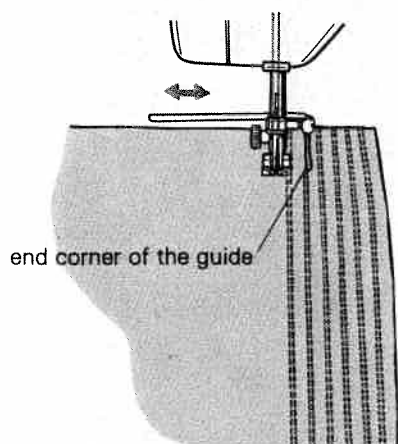
### Setting quilting guide



Insert the quilting guide under the spring plate on the holder.

It is very easy to sew parallel lines with the guide without marking the lines.

### How to sew



Mark the first line with a pensil or tailor's chalk and sew.

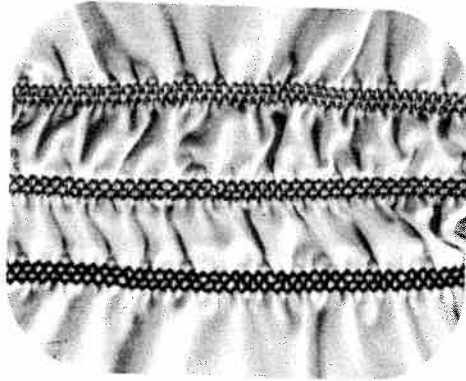
From the second line, sew with the guide just following the seam of the first line.

The width between the seams can be adjusted by moving the guide in the arrow direction.

- \* Tighten the lower thread a little.
- \* Attractive pin tuck stitching cannot be obtained with very thick fabrics.

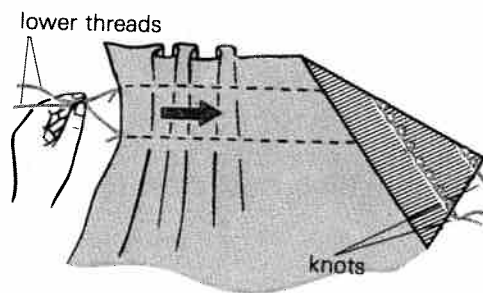
## Smocking

Smocking is done easily by sewing several rows of smocking stitch parallel over the pre-gathered part of children's blouses, etc.

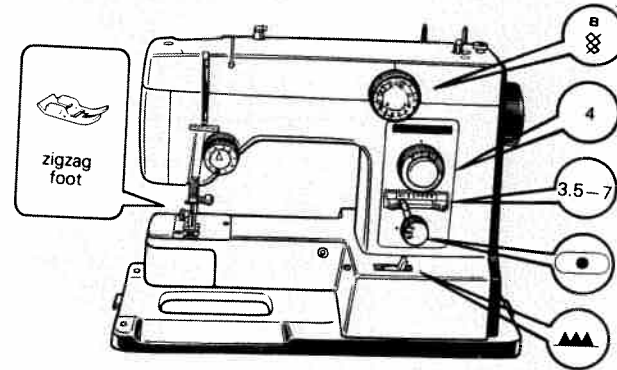


### How to sew

#### Step-1



### Machine setting

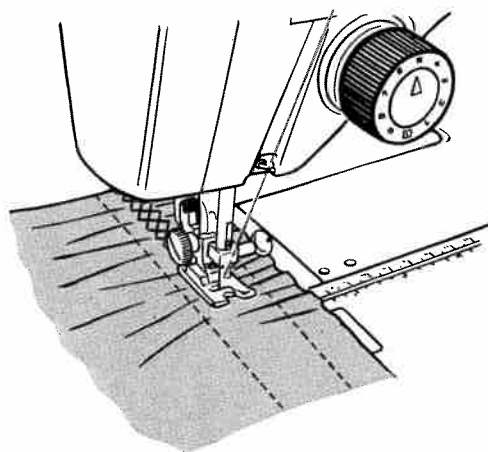


—How to do pre-gathering with the machine—

- (1) Sew two straight lines on the part for smocking with the stitch length 4 and the upper thread tension extremely loose.
- (2) Make knots in one end.
- (3) Gather the fabric toward the knots while holding the ends of the lower threads in the other end.

\* See page 24 for sewing straight stitches.

#### Step-2

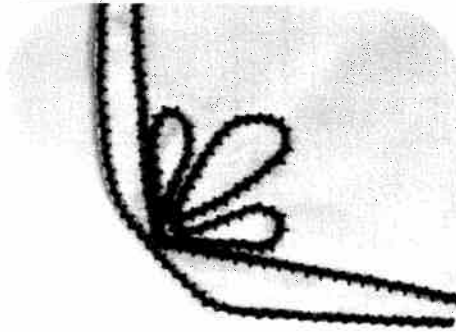


- (1) Sew smocking stitches on the gathered part between two straight stitches.
- (2) Take out the threads used to do pre-gathering after you have finished.

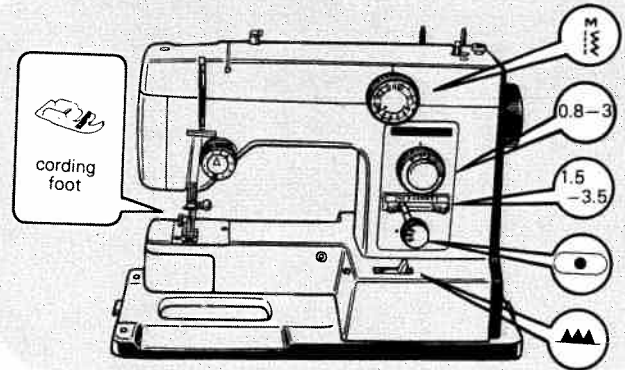
## Cording

An attractive design with lines can be drawn easily with yarn or cords as a decoration for children's clothes, dresses, etc.

### With zigzag stitch

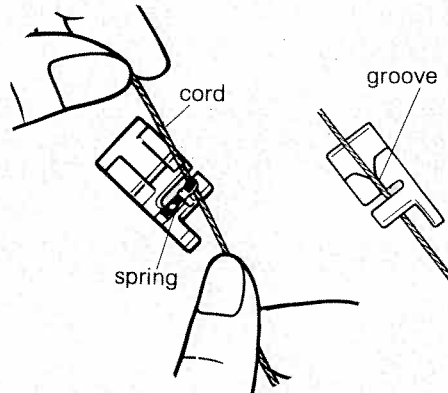


### Machine setting

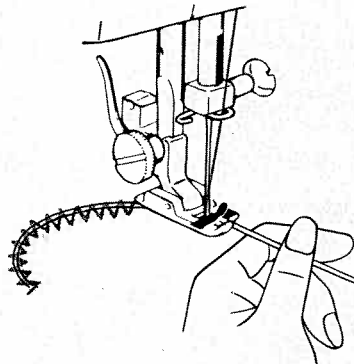


### How to sew

#### Step-1



#### Step-2



Draw the design on the fabric with a pencil or tailor's chalk.

Pass the cord under the spring of the cording foot then to the groove on the back side of the foot.

Decide the width and the length of the zigzag stitch according to the thickness of the cord.

Sew on the cord along the design while guiding the cord with your fingers.

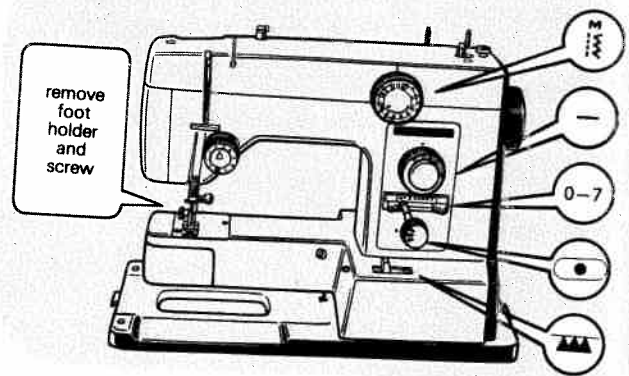
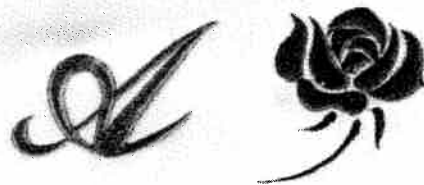
To change the direction at the corner or to sew very small circles, lift the presser bar with the needle down in the fabric outside the corner of the curve and turn the fabric.



# Embroidering and Monogramming

Exquisite designs are easy with the machine.

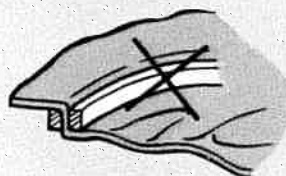
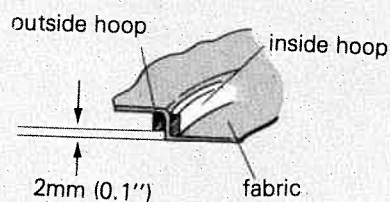
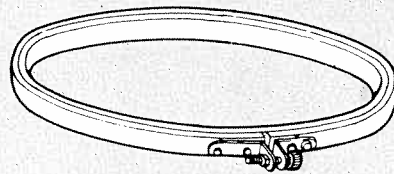
## Machine setting



## How to choose needles and threads

Needle		Use small needle numbers
Thread	Upper	Fine, thin, silky-type of threads
	Lower	As thin as upper thread or thinner

## How to spread the cloth on the hoop

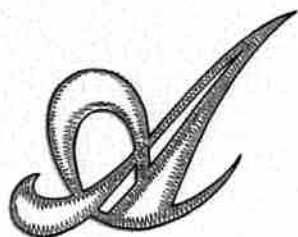


- (1) Draw your desired design on the fabric with a pencil or tailor's chalk.
- (2) Spread the fabric on an embroidery hoop with the drawn design in the center of the hoop.

Push the inside hoop about 2mm (0.1") out of the outside hoop.

- (3) Stretch the fabric as firmly and as evenly as possible.

\* Nice results cannot be obtained if the fabric is not stretched correctly and sufficiently.



Step-1

Pull out the lower thread by turning the hand-wheel toward you while holding the upper thread lightly.

Sew 5—6 stitches with the zigzag width at 0 to make a knot.

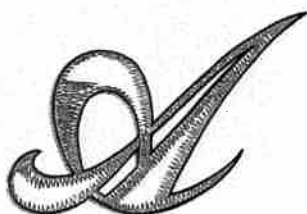
\* Be sure the presser foot lifter is lowered.

Step-2

Set the zigzag width with the stopper and sew along the outline of the design.

Sew the stitches as close as possible.

\* To get better performance, operate the zigzag width lever frequently with the thumb while sewing.



Step-3

Fill in the inside of the design by moving the hoop slightly.

\* Fill with the stitches in the same direction to obtain a nice appearance.



Step-4

To finish filling, set the zigzag width to 0 and sew 5—6 stitches.

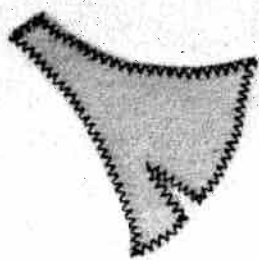
\* For better results with a clear border line, change the direction of the stitch when filling the part right next to the previous one.

Both embroidering and monogramming can be done in the same way mentioned above.

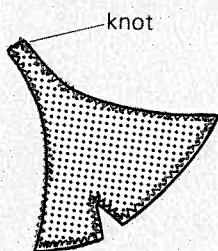
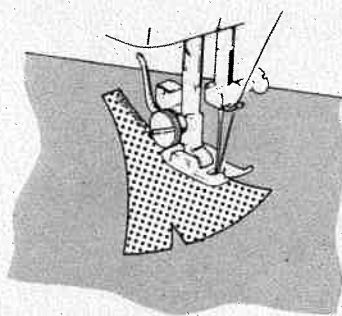
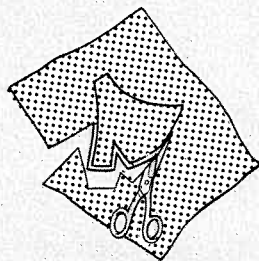


## Applique Work

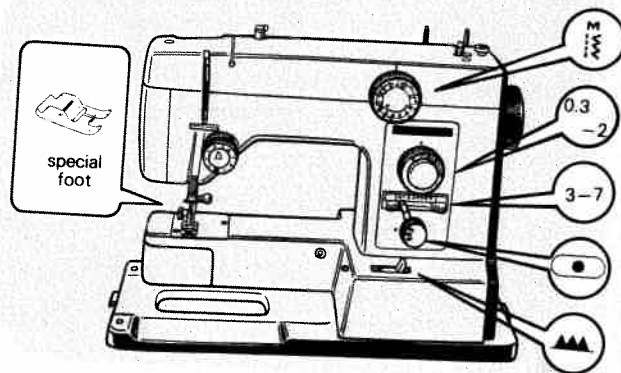
Ideal for the decoration of children's clothes, aprons, etc.



### How to sew



### Machine setting



#### Step-1

Draw the design on the fabric to be used as an applique and cut it out.

#### Step-2

Place the cut work on the part of the base fabric on which you wish to make an applique and baste it.

#### Step-3

Stitch with zigzag stitches on the outline.

The stitch length and width should be adjusted according to the figure and the size of the cut work and the type of the base fabric.

To change the direction at the corner or to sew very small circles, lift the presser bar with the needle down in the base fabric slightly outside of the cut work and turn the fabric.

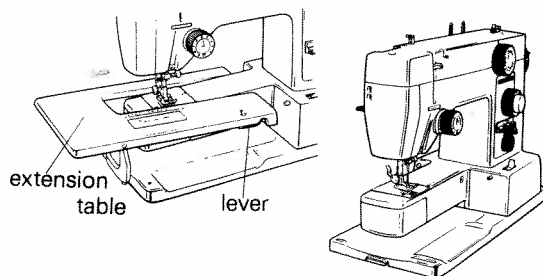
#### Step-4

Sew 5-6 stitches in the end with the zigzag width at 0 to keep the thread ends from coming out.

## 5. HOW TO USE THE FREE-ARM

Places which were once hard or impossible to sew can now be sewn easily with a free-arm. You can do sleeves, cuffs, collars, the edge of trousers, tubular articles, etc.

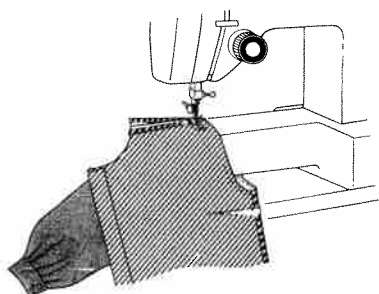
### Preparation of the machine



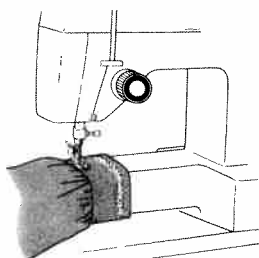
Pull out the lever and slide off the extension table in the arrow direction.

\* Unless you pull out the lever the extension table will not come out.

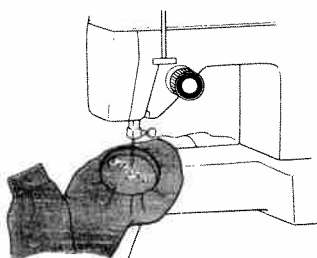
### Various useful methods



Put the armhole and the sleeve together facing inside and sew.



It is easy to sew or embroider on sleeve cuffs of T-shirts, blouses, etc.



Enjoy monogramming sleeves.

## 6. MAINTENANCE

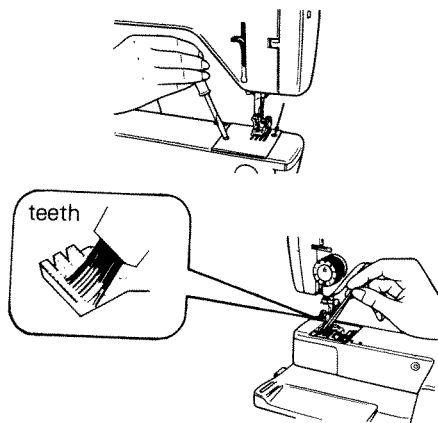
Your new machine requires regular cleaning and oiling for satisfactory sewing performance. A machine which is used for a few hours a day needs to be cleaned and oiled once a month.

- \* Do not tamper with parts while cleaning or oiling.
- \* Be sure to unplug the machine while cleaning or oiling.

### Cleaning Feed Dog and Rotary Hook

#### Feed dog

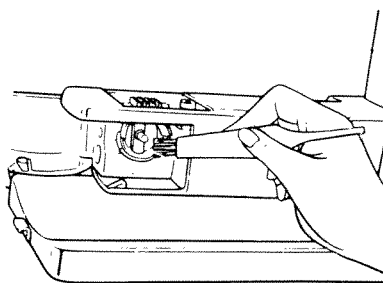
Dust or lint in the needle plate or feed dog may lead to improper movement of the feed dog or other many troubles, so they always need to be clean.



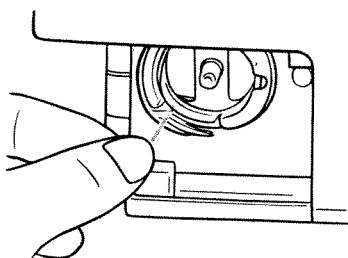
- (1) Set the needle in the highest position by turning the handwheel toward you.
  - (2) Remove the needle, and the foot.
  - (3) Remove the needle plate, loosening the screws with the large screwdriver.
  - (4) Brush off all the lint with the attached cleaning brush.
- Clean especially the upper part of the feed dog and between the teeth.

#### Rotary hook

Dust or lint in the rotary hook cause the slow running of the machine or irregular stitches, so it always needs to be clean.



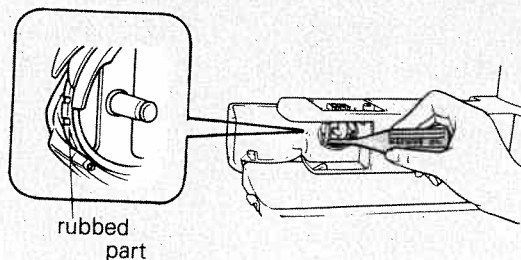
- (1) Open the shuttle cover and remove the bobbin case.
- (2) Brush off all the lint with the attached cleaning brush.



- \* When the thread is rooted in the hook groove, turn the handwheel away from you and take out the thread.

## Oiling

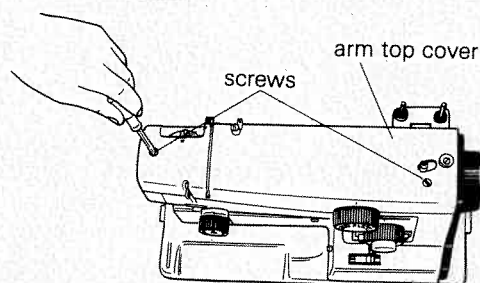
### Rotary hook



Apply one drop of oil to the rubbed part in the hook.

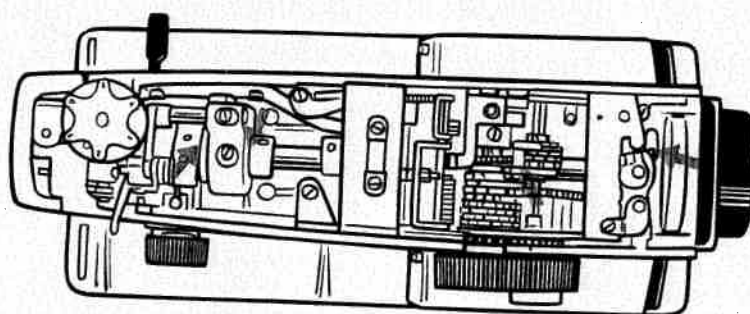
\* Too much oil may stain your fabric and cause some sewing difficulty.

### Arm top

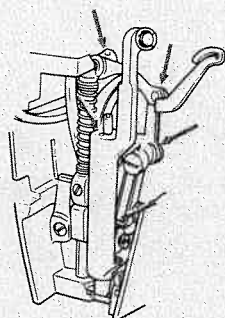


(1) Remove the arm top cover by taking out the screws.

(2) Apply one drop of oil to the parts indicated by arrows.



### Inside the face plate



Apply one drop of oil to the parts indicated by arrows.

\* After oiling, run the machine 5 or 6 times or run it fast for 1 or 2 minutes.

\* Use oil manufactured specifically for sewing machine use. Other oils will eventually cause the mechanism to jam.

\* In the case that the machine is not used for more than one month, always apply oil before using it.

## 7. TROUBLESHOOTING CHART

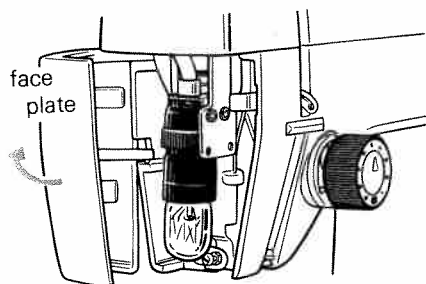
Trouble	Probable Cause	Correct Operation
Machine does not sew	Not plugged in properly. Power supply switch is not on. Thread is stuck in the hook groove.	Page 7 7 57
Making noise Running slowly	Lack of oil. Dust of thread jamming the rotary hook. Dust of thread jamming the feed dog. Thread is stuck in the hook groove.	58 57 57 57
Breaking upper thread	Improper threading. Upper thread tension too tight. Needle bent or blunt. Improper needle setting. Removing fabric when take-up lever is not in the highest position. Upper thread too thick or too thin for needle used.	14 24.26 9 9 23 7
Breaking lower thread	Improper threading. Lower thread tension too tight. Dust of thread jamming the bobbin case or around the spring of the bobbin case.	12 12 —
Skipping stitches	Improper needle setting. Needle bent. Improper needle and thread for the fabric. Improper upper threading. Too much oil.	9 9 7 14 58
Stitches not locked	Upper thread tension too loose. Improper tension of the lower thread. Improper needle for the thread.	24.26 12 7
Wrinkled fabrics	Upper or lower thread tension too tight. Improper threading of upper or lower thread. Needle too thick for the fabric. Stitch length too long for the fabric.  * When sewing very fine fabric, place thin paper underneath the fabric for better results.	24.26 12.14 7 —

Trouble	Probable Cause	Correct Operation
Fabric not moving	Dust or thread jamming on the feed dog. Feed dog is lowered.	Page 57 1
Breaking needle	Improper needle setting. Needle bent. Needle clamp screw too loose. Upper thread tension too tight. Needle too thin for the fabric. Changing pattern or width of the stitch with the needle down in the fabric. Setting stitch width more than 3.5 when sewing with twin needle.	9 9 9 24.26 7 — 20
Light going out	Not plugged in properly. Power supply switch is not on. Light bulb burnt out.	7 7 60

N.B. If trouble is still apparent in the machine, please consult your nearest dealer. Do not try to correct the fault by yourself.

—Changing the light bulb—

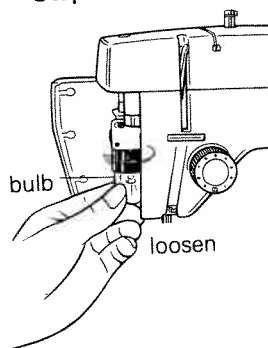
Step-1



Unplug the machine.

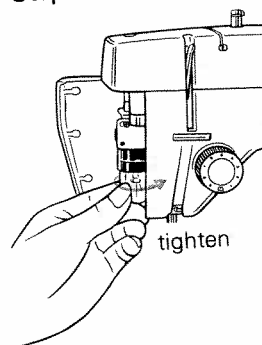
Open the face plate in the arrow direction.

Step-2



Remove the bulb by unscrewing it counter clockwise.

Step-3



Install a new bulb by screwing it clockwise. Plug in the machine.